

# LOCAL GOVERNMENT AND COMMUNITY ASBESTOS SAFETY FINAL REPORT

Prepared for the Asbestos Safety and Eradication Agency  
June 2017

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**UTS:CLG**  
CENTRE FOR LOCAL GOVERNMENT

UTS CRICOS PROVIDER CODE: 00099F



### Citing this report

Goodall, A., & Ahmed, S. 2017. *Local Government and Community Asbestos Safety (Final Report)*. University of Technology Sydney, Centre for Local Government, Sydney, NSW.

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UTS CRICOS Provider Code: 00099F





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# Summary

## Introduction

Australia has one of the highest incidences of malignant mesothelioma worldwide (Rosemary et al. 2015). Whilst Australia's cancer registries show that incidences of mesothelioma have plateaued, there is an anticipated rise of asbestos-related diseases due to non-occupational exposure to asbestos in Australia (Olsen et al. 2011; Wiesel, Freestone & Randolph, 2013).

As the level of government closest to Do-it-Yourself (DIY) home renovators and builders, local governments have a responsibility to ensure as best as possible that any development activity within their local government area (LGA) is undertaken with regard to relevant federal and state legislation and local planning laws. This includes the safe handling and legal disposal of asbestos containing materials (ACMs).

This project researches the role of local governments in improving residential asbestos safety and the opportunities for local governments to further address some of the challenges of asbestos safety in the residential sector.

The research was undertaken in five complementary stages outlined below.

- > A review of research previously commissioned by the Asbestos Safety and Eradication Agency (ASEA) and other academic and 'grey' literature
- > A desktop review of all local government websites across Australia for content on asbestos
- > A national survey of local governments about their role in managing asbestos safety in their communities
- > A series of interviews and focus groups with selected local governments
- > Two online discussion forums and a survey with 103 DIY home renovators from across Australia

This report summarises the findings from these research activities.

## The context of community asbestos safety

### Asbestos awareness and knowledge in the community

Prior research has highlighted asbestos safety issues in the community, in particular for DIY home renovators. A Survey of 10,000 adults in NSW in 2008 found that at least 858 people in the sample had undertaken DIY home renovations. Out of these at least 61% reported probable exposure to asbestos through unsafe contact with ACMs (Park et al. 2013).

Several reports and online discussion forums with home owners confirm the findings of previous research which has identified the following risk factors:

- > There is low awareness by many home owners about the *existence* of asbestos in their home or all of the places asbestos can be found (WA Department of Health 2011).
- > There is low awareness about the *risks of asbestos exposure* among DIY home renovators, especially those who are younger (under 40 years of age), and *where* asbestos could be located in their homes (ASEA & Curtin University 2015; ASEA & EY Sweeney 2016a; ASEA & EY Sweeney 2016b; ASEA & Asbestoswise 2016). They are

likely to place others at risk of exposure to asbestos by involving a friend or family member in aspects of renovation (ASEA & EY Sweeney 2016b).

- > The reasons for conducting asbestos surveys are generally reactive.

Previous research also identified several barriers to engaging with professionals licenced to handle and remove asbestos including:

- > Awareness of available services
- > The high costs of those services
- > A perceived lack of accessible asbestos removal services (ASEA & Asbestoswise 2016)

Among the online discussion forum participants there is high awareness of such services and a strong propensity to use them. However, only a few appeared to know that a licensed asbestos removalist must be used to remove more than 10m<sup>2</sup> of non-friable and any quantity of friable asbestos from their property. Assuming this low level of knowledge is widespread, there could be an elevated risk of exposure amongst DIY home renovators with a low propensity to use licenced removalists.

### Illegal dumping

Most local governments consulted as part of this research reported that illegal dumping is an issue and a significant cost to them. There is limited data on the actual volume of illegally dumped ACMs in Australia. Only one of the 14 local governments consulted as part of this research records the cost of cleaning up illegally dumped asbestos per annum (estimated at \$100,000). Two other local governments allocate almost \$800,000 per annum to clean up all illegal dumping (including materials other than asbestos) but do not record the costs associated with individual materials.

Previous research and the focus groups with local governments identify the motivations for illegal dumping as:

- > The high price of tip fees due to high gate fees and or state and territory government levies
- > The inconvenience of accessing a waste facility that accepts asbestos
- > A general apathy and belief that dealing with ACMs properly is difficult

Analysis of the National Asbestos Waste Facilities Database by ASEA reveals a ratio of one waste facility licenced to accept asbestos for every two LGAs nationally. However, this is skewed by higher ratios in NSW and Queensland with lower ratios in all other states and territories.

It has also been reported that local governments find it difficult to enforce regulations to prevent the illegal dumping of ACMs. The potential of large fines is not an effective deterrent and the lack of facilities and high disposal fees is often prohibitive (ASEA & Acil Allen 2016). During focus groups with local governments, environmental health staff commented that it is extremely difficult to gather the necessary visual evidence to prosecute illegal dumpers. Despite illegal dumping being an issue for almost all of the 14 local governments consulted, none have ever attempted to prosecute someone for illegal dumping citing the evidence requirements as a disincentive given the legal costs.



## The current role of local government in community asbestos safety

### The roles and responsibilities of local governments

Local government is highlighted as the tier of government that is closest to the community and its housing decisions, and is the level of government most aware of home renovation in their LGAs (Beer et al. 2014). Local governments are also often the first point of contact by the general public for information including about asbestos (NSW Ombudsman, 2010).

The national survey of local governments suggests that the majority of local governments are assuming responsibilities for managing asbestos in public buildings (81%), managing and regulating the illegal dumping of ACMs (80%) and educating the community around asbestos safety (73%). More than half also ensure compliance by homeowners to asbestos regulations (66%) and manage asbestos removal during emergencies (59%). The survey indicates that less than half of local governments are assuming responsibility to provide or maintain infrastructure to collect and dispose ACMs (44%) (NSW Ombudsman 2010).

Managing and regulating illegal dumping (80%) was rated by surveyed local governments as their most important responsibility followed by providing residents with details about waste facilities or landfills that accept ACMs (69%). Only 55 per cent rated educating and raising overall awareness on residential asbestos safety as extremely or very important.

The survey findings suggest that local governments view their most important role in asbestos management as managing asbestos in their own facilities and supporting the legal disposal of ACMs.

### Actions by local governments to improve asbestos safety

The survey of local governments showed that the most common actions local governments take are:

- > Distributing educational material relevant to DIY renovators or home owners (63%)
- > Providing a dedicated section on asbestos safety on their websites (42%)
- > Organising or facilitating asbestos information events or awareness days (20%)

The review of local government websites suggested that a much lower percentage have a dedicated webpage for asbestos than indicated by the survey.

In combination, the national survey and review of local government websites identified 108 local governments delivering one or more of the following five categories of asbestos-related initiatives:

- > Asbestos testing or inspection programs (52)
- > Awareness events or information sessions on asbestos safety and management (39)
- > Asbestos removal/disposal program or service (28)
- > Providing asbestos removal/disposal kits (16)
- > Initiatives related to illegal dumping of asbestos (4)

This is most certainly an under-representation as only 32% of all the local governments across Australia participated in the survey, and not all local government websites have complete information on their asbestos-related initiatives.

## Communication with homeowners about asbestos safety

### Current communication by local governments around asbestos safety

Previous research by ASEA and others position local government as the first point of contact by the community for a range of information including about asbestos. However, it has been suggested that the complexity and volume of the information about asbestos can be challenging for audiences who may lack the technical literacy to navigate it. The lack of a coordinated approach with a cohesive set of messages, strategies and efforts to target stakeholder engagement is seen as a barrier to initiating behaviour change around asbestos safety (ASEA & Desai 2015).

The national survey of local governments (Figure 2, page 14) suggests, that the most common ways local governments are communicating with residents about asbestos safety are:

- > Distributing educational material relevant to DIY renovators or home owners (63%)
- > Providing a section/s on asbestos safety and management on their websites (42%)
- > Organising or facilitating information events or awareness days (20%)

The review of local government websites revealed that:

- Most local governments have some information about asbestos on their website (77%)
- The most common asbestos-related information on local government websites is about removing and/or disposing of asbestos (72%)
- The second most common asbestos-related information is about asbestos safety and management during DIY renovations and demolition (52%)

Although there are no reports about the effectiveness of local government communication about asbestos safety, the national survey suggested that local governments themselves do not widely see their websites or distributed materials as effective.

Local governments themselves appear to be contributing to the fragmented nature of information about asbestos. Across local government websites information on asbestos is often found on multiple webpages devoted to different divisions or departments. Some local governments have organised their information about asbestos in dedicated webpages to make it easier for people to find relevant information about a range of asbestos-related topics. However, this is not common.

At least half of the home owners that participated in the online discussion forums stated that besides paying their rates they rarely contact their local government. They stated that they receive periodic newsletters and notices from local government and see information from local government in local newspapers, however, most have no recollection of ever obtaining any information about asbestos from their local governments and have not requested any. Most participants are also unaware of any actions their local government, or anyone else, is delivering to help people handle asbestos safely, even those whose local government is delivering initiatives.

### Homeowner preferences for communication about asbestos safety

Homeowners who participated in the online discussion forums (n=103) were asked to complete a survey to understand their communication preferences around aspects of asbestos safety.

The responses show that after building certifiers and builders/tradespeople, local governments are the most trusted sources of information for:

- > The health risks of exposure to asbestos
- > How to identify asbestos
- > How to safely handle ACMs

Local governments are the most trusted source of information about how to dispose of ACMs, even though at least 50 per cent do not operate a facility that accepts ACMs.

Homeowners prefer (or would prefer) to receive information about the practical handling and disposal of asbestos in workshops and information sessions but the internet, face-to-face advice, television and mail/post are accepted sources of information.

Homeowners prefer communication from local government, by mail/post followed by the internet. Importantly, given the preference for homeowners to receive information about asbestos safety, workshops and information sessions also scored highly as a preferred source of communication from local government.

## Enablers and barriers for local governments to manage and improve community asbestos safety

### Enablers

Responses to the national survey of local governments show that the most important enablers for local governments are seen as the ability of environmental health officers to directly enforce regulation (72%), clear delineation of roles and responsibilities between different levels of government (70%), the training of staff to improve internal knowledge about asbestos (67%) and the availability of dedicated resources for asbestos management in the community (57%).

Key enablers to reduce the unsafe handling of asbestos have been suggested to be education, improving convenience for proper disposal and creating effective disincentives for illegal disposal (NSW Ombudsman 2010). However, the national survey suggests that there is no clear consensus among local governments about this. Subsidising tip fees for disposing ACMs (45%) and issuing fines for non-compliant behaviour (43%) were the most common suggestions. Local governments do not appear to strongly believe that actions such as providing asbestos removal kits; subsidising the use of trained asbestos removalists; and providing free of charge asbestos assessment, removal, collection and disposal campaigns or days, would encourage asbestos safety by DIY renovators. In online discussion forums homeowners additionally suggested more asbestos awareness campaigns that include easily accessible online information and workshops/information sessions

### Barriers

The main barriers identified by local governments in the national survey and focus groups are:

- > A lack of funding attached to asbestos related initiatives including education
- > Insufficient resources to enforce asbestos related regulations
- > Lack of a clear strategy on asbestos safety and management

Local governments in some states, most commonly in Victoria and Queensland, also identified a lack of coordination between levels of government as a barrier.

The focus groups also highlighted the misperception that local governments as principle certifying authorities for development have visibility of most DIY home renovation in their LGA. The staff consulted said that the majority of home renovation is invisible to them unless a demolition permit is required or load bearing modifications are being made, or a complaint is made from another resident. This limits their ability to monitor residential asbestos safety.

## Asbestos policies

The national survey and focus groups with local government staff indicated that clear delineation between the roles and responsibilities of local and state government is important for local governments to manage community asbestos safety. Local governments from NSW were less likely than other local governments to report a lack of clarity, stating that this is in part because of their use of the *Model Asbestos Policy* as a template for their own asbestos policies.

Survey respondents who indicated that their local government has an asbestos policy (n=80) indicated that the main priority areas are:

- > Managing asbestos risks within the local government workplace and among their workers (89%)
- > Outlining their roles and responsibilities for managing asbestos (76%)
- > Responding to emergencies and incidents of asbestos removal and disposal (75%)
- > Managing asbestos waste landfills and facilities (48%)
- > Outlining their processes for assessing development applications (43%)
- > Identifying locations with naturally occurring / weathering asbestos and/or asbestos contamination (26%)

The comments from local government staff and the survey responses indicate that a state-wide model asbestos policy helps clarify the role of local governments in managing asbestos in their communities and sets the parameters for the relationship between state and local governments. This suggests merit in states and territories outside of NSW developing similar model policies.

## Ideas to better support local governments improve community asbestos safety

The most commonly cited need by local governments was additional resources to help them drive community education, enforce regulatory compliance and implement asbestos safety initiatives. Most commented that a suite of resources for them to use as a basis for education campaigns would also be useful.

The local governments consulted in the focus groups would also like state government waste levies to be removed for asbestos. However, there appears to be a misperception that state government levies are the cause of high disposal costs in some jurisdictions with high gate fees the main contributor.

Another idea that was welcomed is a smart phone application allowing residents to inform local governments of instances of illegal dumping. Environmental health officers commented that

reporting is usually delayed after the event, the extent of dumping is not always reported accurately and they have limited capacity to always investigate immediately.

## Features of an evidence-based response to improve community asbestos safety

Evidence suggests that current campaigns around asbestos safety and statutory controls have had limited success and can be expensive to enforce. This presents an opportunity to develop and trial non-statutory models of behaviour change around asbestos safety.

Broadly, there are three key objectives for local governments in relation to improving asbestos safety that models of behaviour change could be applied to:

- > Increasing awareness and education of asbestos and the dangers of exposure
- > Improving homeowners' management and removal of asbestos
- > Improving lawful disposal of ACMs

The behaviour change frameworks provided by Social Practice Theory, DEFRA's 4 E's, Nudge Theory and the Health Belief Model suggest that local governments should implement a multi-faceted response to asbestos safety that includes:

- > Campaigns and messaging about how to safely handle and dispose of ACMs, the costs of illegal dumping to the community and that personalise the health risks of asbestos exposure to target cohorts (e.g. DIY renovators)
- > Implementing affordable and convenient options for people to safely remove and dispose of ACMs
- > Leading by example by implementing asbestos policies or management plans, and ensuring the safe handling of ACMs in public buildings and infrastructure
- > Sustaining efforts to ensure that messages are reinforced to embed behaviour
- > Providing positive feedback where measurable behaviour change, such as a reduction in illegal dumping, is realised and communicating this as benefits to the community

The survey and online discussion forums with homeowners provide additional insights into how local governments can effectively deliver campaigns and messages about asbestos safety:

- > Local government websites are an important place for local governments to provide information to their communities about asbestos safety. However, the information needs to be comprehensive, updated and organised such that it is easy for residents to find.
- > Local governments could offer workshops and information sessions for residents as an effective means of promoting asbestos safety. Although hardware stores are not a trusted source for information about asbestos safety they are a place that home renovators congregate. There is an opportunity for local governments to partner with major hardware stores to provide DIY home renovators a hands-on and interactive educational experience about asbestos safety.
- > Although mail outs are not the preferred way for people to receive information about asbestos safety, it is a preferred way for people to receive information from local governments. This suggests that local governments could include some targeted

information to residents as part of mail outs such as rates notices. Brief information about how to dispose of asbestos, how to report illegal dumping and how to report suspected unsafe handling of asbestos could be disseminated this way.

## Conclusions

In summary, the findings of this research show:

- > There is low awareness about the risks of exposure to asbestos, where asbestos could be located and how to safely handle asbestos among DIY home renovators.
- > Many local governments are playing a role in improving community and residential asbestos safety through distributing educational materials and implementing initiatives such as providing asbestos removal and disposal equipment and services.
- > The fragmented nature of information about asbestos has been previously cited as a contributor to this low awareness among homeowners. The review of local governments confirmed that most local governments contribute to this with poorly organised websites with regard to information about asbestos.
- > After building certifiers and builders/tradespeople, local governments are the most trusted sources of information for about asbestos safety, and are the most trusted source for information about disposing asbestos. This highlights the opportunity for local governments to play a key role in education to improve asbestos safety.
- > Workshops and information sessions are the preferred way for homeowners to receive information about asbestos safety, although mail, internet and customer service centres are the preferred way for people to communicate with their local government.
- > The capacity of local governments to improve residential asbestos safety probably does not extend to the development application process to the extent that other research has suggested. Most DIY home renovations are minor and exempt from that process despite posing a risk of exposure to asbestos.
- > Behavioural models of change provide an evidence-based framework for local governments to improve asbestos safety that combines removing structural barriers to safely removing and disposing ACMs, providing personalised education and implementing asbestos policies. Home owner communication preferences suggest that effective campaigns could involve workshops and information sessions for residents, comprehensive websites and educational material, and mail outs with rates notices or other local government correspondence.
- > For local governments to implement a comprehensive community asbestos safety campaign they believe that they need additional resources. These could be in the form of grants but in the long-term will require investment from local government budgets. Local governments may need support to collect the data required to present a business case for additional resource allocation for asbestos safety given the fiscal constraints many face.



# 1 Introduction

## 1.1 Background

Australia has one of the highest incidences of malignant mesothelioma worldwide. Asbestos was banned in Australia in 2003 but exposure continues to be a serious issue (Rosemary et al. 2015).

Whilst Australia's cancer registries show that incidences of mesothelioma have plateaued, evidence suggests that asbestos exposure during home renovation is increasing. As a result, there is an anticipated rise of asbestos-related diseases due to non-occupational exposure to asbestos in Australia. It is estimated that over one-third of existing Australian homes contain asbestos and there is a risk of increased rates of mesothelioma due to the popularity of DIY home renovation (Olsen et al. 2011; Wiesel, Freestone & Randolph, 2013).

Local governments play a key role in educating their communities about asbestos and residential asbestos safety. As the level of government closest to builders and DIY home renovators local governments have a responsibility to ensure as best as possible that any development activity within their local government area (LGA) is undertaken with regard to relevant federal and state legislation and local planning laws. This includes the safe handling of ACMs and extends to the provision of information and support to influence behaviour change for best practice and legal handling of ACMs by residents.

This project is to research the current role of local governments in improving residential asbestos safety and the opportunities for local governments to further address some of the challenges around asbestos safety that exist in the residential sector.

## 1.2 Approach

The research was undertaken in five complementary stages outlined below. Details about each of the methods are presented at Appendix A.

- > A review of research previously commissioned by the Asbestos Safety and Eradication Agency (ASEA) and other academic and 'grey' literature
- > A desktop review of all local government websites across Australia for content on asbestos
- > A national survey of local governments about their role in managing asbestos safety in their communities
- > A series of interviews or focus groups with local governments
- > Two online discussion forums and a survey with 103 DIY home renovators from across Australia

Details about the stakeholders consulted and data collection tools are presented in Appendices B-F.

## 1.3 This report

This report summarises the findings from the research activities outlined Appendix A. The rest of the report consists of the following:

- > The context of community asbestos safety in Australia (Section 2)
- > The current role of local government in community asbestos safety (Section 3)
- > Current communication around community and residential asbestos safety (Section 4)
- > Enablers and challenges for local governments to manage and improve community and residential asbestos safety (Section 5)
- > Ideas to help local governments improve community and residential asbestos safety (Section 6)
- > Features of an evidence-based response to community and residential asbestos safety (Section 7)
- > Case studies of good practice promotion of community asbestos safety by local governments (Section 8)
- > Conclusions (Section 9)
- > References (Section 10)
- > Approach, methods and data collection tools (Appendices B-F)
- > Detailed responses from the national survey of local governments (Appendix G)
- > A list of local governments delivering asbestos safety initiatives (Appendix H)



## 2 The context of community asbestos safety in Australia

### 2.1 Asbestos awareness and knowledge in the community

#### 2.1.1 Do-it-yourself home renovators

In 2010, the NSW Government warned that the public has little or no knowledge about the dangers of asbestos and the types of measures required to handle it safely (ASEA & Desai 2015). Research prior to this had highlighted the issue of asbestos safety in the community, in particular amongst DIY home renovators. A survey of 10,000 adults in NSW in 2008 found that 24 per cent of respondents had undertaken DIY home renovations and 61 per cent reported probable exposure to asbestos primarily through contact with asbestos-containing cement sheeting, insulation materials and cutting, drilling or sanding other ACMs (Park et al. 2013).

Several reports have identified risk factors for exposure amongst DIY home renovators:

- > There is low awareness about the risks of asbestos exposure amongst DIY home renovators, especially those who are younger (under 40 years of age). The implications include mishandling asbestos, including not wearing and using protective equipment, improper and unsafe removal of asbestos and improper disposal (ASEA & Curtin University 2015; ASEA & EY Sweeney 2016a; ASEA & EY Sweeney 2016b; ASEA & Asbestoswise 2016; WA Department of Health 2011).
- > There is low asbestos by many home owners about the existence of asbestos in their home or all of the places asbestos can be found (WA Department of Health 2011).
- > The inadequate management of exposure to asbestos from asbestos cement sheeting which is the biggest source of asbestos found in Australian residences (ASEA & Monash University 2016).
- > They are likely to place others at risk of exposure to asbestos by involving a friend or family member in aspects of renovation (ASEA & EY Sweeney 2016b).

Cases of asbestos exposure have previously occurred in two 'waves' affecting occupational cohorts (ASEA & Curtin University. 2015):

- > The first 'wave' were asbestos miners and manufacturers
- > The second 'wave' were tradespeople using asbestos products

The third 'wave' of asbestos has not occurred but is predicted to affect people who undertake DIY renovations (Armstrong & Driscoll 2016).

There is particular concern over this predicted 'third wave', especially considering that the volume of DIY home renovation in Australia has increased. Between July 2014 to April 2016 over half of Australian adults (56%) were estimated to have undertaken work on a property (ASEA & EY Sweeney 2016b), more than doubling the 24 per cent estimated in 2008 (Park et al. 2013). Alarming, knowledge about the dangers of asbestos declined from 62 per cent in 2014 to 49 per cent in 2016 (ASEA & EY Sweeney 2016b). Other research has found that young people (under 40 years of age) are less likely to feel personally susceptible to asbestos exposure but more likely to intend to renovate property in the future (ASEA & Asbestoswise 2016).

The online discussion forums with current or potential DIY home renovators as part of this research confirm their risk of exposure to asbestos through inadequate awareness and knowledge. Almost all of the participants are aware to some extent of the dangers of exposure to asbestos. However, despite the group being selected based on living in a home built before 1990 almost half believe that their homes do not contain asbestos and a quarter is unsure. Those that are unsure commented that if asbestos is in their homes it would be in the walls or eaves. Only a few mentioned that asbestos can be found in bathrooms, kitchens and flooring.

This mirrors the findings of a previous survey of potential homebuyers where respondents indicated that they did not feel confident in their ability to identify asbestos and where it may be present. Many were surprised to discover that common renovation activities can lead to asbestos exposure (ASEA & EY Sweeney 2016a).

The majority of the participants in the online discussion forums have some knowledge of the precautions to take when handling asbestos, believing that wearing protective equipment such as a mask, gloves or protective clothing is essential. This contrasts previous research that reported that DIY renovators do not know of precautionary measures to minimise the risk of exposure such as wearing protective clothing and masks (ASEA & EY Sweeney 2016b; ASEA & Asbestoswise 2016). However, the fact that most of the participants in the online discussion forums are unaware that their homes contain asbestos or all of the places it can be found creates a risk that they could unintentionally expose themselves.

It has been suggested that the best method for managing the risk of asbestos exposure in the community is to raise awareness amongst DIY home renovators during the home purchasing process, including advocating for an asbestos survey prior to purchase (ASEA & Ithaca Group 2016; ASEA & ACIL Allen 2016). However, a survey of potential homebuyers revealed that nine out of ten (92%) intended to check their properties for asbestos but only two-thirds (64%) had actually had an asbestos survey. This research found that the triggers for asbestos surveys are more reactive than proactive; occurring after asbestos has already been disturbed (ASEA & EY Sweeney 2016a). The online discussion forums support the reactive triggers for asbestos surveys but suggest that the percentage that has an asbestos survey could be lower. Only eight out of 103 participants revealed that they had an asbestos survey when they bought their existing homes. Although the remainder had building and pest inspections before purchasing their home, it never occurred to them to also get asbestos survey.

*"We really weren't aware of an asbestos assessment before purchasing this home but I am concerned now."* Homeowner in metropolitan NSW

*"When we purchased the house in 1980 we didn't have an asbestos survey or assessment done because we weren't aware you could get it."* Homeowner in regional VIC

*"We didn't have an asbestos survey or assessment done before we purchased our home... You know I didn't even think about it... We didn't know then and still don't."* Homeowner in regional TAS

Despite this, the online discussion forums did suggest that the message about asbestos safety is reaching some DIY home renovators. Some of the participants that previously suspected that their homes contain asbestos stated that they hired a professional for a survey once they

suspected asbestos might be present. Once they discovered asbestos they used a professional builder for their home renovations so as not to place themselves at risk of exposure. Furthermore, the majority of those who are planning renovations stated that they will use an expert if any asbestos removal is required regardless of the amount.

*“Yes our house has had asbestos...a big reason we used an accredited builder for our major renovations...some was removed in the renovations but the rest has been left undisturbed.”* Homeowner in regional NSW

*“If I have to renovate the kitchen and bathroom in the house and we find asbestos, I will call the removalists and let them handle it because it is too risky.”* Homeowner in metropolitan NSW

*“I would always use a licensed asbestos removalist no matter how much asbestos I have to remove. I do not want to risk my health just to save some money.”* Homeowner in metropolitan SA

Previous research identified several barriers to engaging with professionals licenced to handle and remove asbestos including:

- > Awareness of available services;
- > The high costs of those services; and
- > A perceived lack of accessible asbestos removal services (ASEA & Asbestoswise 2016)

The online discussion forums suggested that amongst those participants there is high awareness of such services and a strong propensity to use them. However, almost all are unaware of the precise regulations on the amount of ACMs that homeowners are allowed to remove. Only a few appeared to know that a licensed asbestos removalist must be used to remove more than 10m<sup>2</sup> of non-friable and any quantity of friable asbestos from their property. While this is not a risk in these groups because of their propensity to use licenced removalists, it does suggest that knowledge of the regulations around asbestos removal is low amongst DIY home renovators. Therefore, amongst cohorts of DIY home renovators where there is a low propensity to use licenced asbestos removalists for the reasons highlighted above, there could be an elevated risk of exposure to asbestos.

### 2.1.2 Tradespeople

Tradespeople, in particular plumbers and electricians, have a high risk of exposure to asbestos, due to the nature of their work..Research suggests that there is a high probability that plumbers (80%) and electricians (70%) have been occupationally exposed to asbestos (ASEA & Ithaca Group 2016). Other research found that amongst these occupations there is a high level of awareness and concern about the dangers of exposure to asbestos. However, the understanding of asbestos is inconsistent, the sense of harm seems to be generalised rather than specific, and does not lead to sufficient knowledge and actions for safe practices and compliance (EY Sweeney 2016a; ASEA & Ithaca Group 2016).

Around a quarter of plumbers and electricians (25-30%) are considered ‘active’ in the ‘spectrum of change pathway’ around asbestos safety. These tradespeople are characterised as having

high levels of awareness about asbestos and insist on safe practice such as the use of specialists to remove ACMs. This group are also the most likely to resist pressure to cut corners in asbestos management and removal (ASEA & Ithaca Group 2016). However, 15-20 per cent of plumbers and electricians are unaware of asbestos, or are aware but do not consider asbestos as personally relevant. The remaining 50 per cent are 'aware' of asbestos risk but believe themselves not to be at risk and experience time and cost pressure and are more likely to cut corners. They are aware of asbestos and know how to protect themselves but have not done specific training and lack knowledge to insist on safe practices. (ASEA & Ithaca Group 2016).

Tradespeople acquire their asbestos knowledge from a range of sources. This is largely due to the changes in the trades training practises, including a shift in apprenticeship employment from larger organisations to smaller businesses. As such, training is increasingly being delivered less consistently and potentially in a less supervised environment (ASEA & Ithaca Group 2016).

### 2.1.3 Remote communities

Managing asbestos in remote communities is a challenge which has been identified in various reports. There are four main challenges for managing asbestos in remote communities (ASEA & Matrix on Board Consulting 2017):

- > Cost – the cost of managing asbestos is higher in remote communities than in urban centres. This can be attributed to the lack of local trained people to identify and remove asbestos, with trained professionals often having to be flown in. There is a lack of waste facilities which accept asbestos which means there are additional transportation costs to move asbestos to a suitable management facility. In addition, competing priorities and significant financial pressure can take precedence over asbestos management in remote communities
- > Capacity – there is a lack of appropriate equipment with which to safely work with asbestos. This includes negative air pressure units, asbestos rated vacuums and decontamination units.
- > Awareness – in remote communities there is a lack of public awareness about the risk of exposure to asbestos and the dangers of working or playing in areas with illegally dumped asbestos. There is also a lack of awareness about the risks of exposure to ageing asbestos in homes.
- > Management – many communities do not have the necessary strategies in place to undertake proper management of asbestos in their communities. For instance, many communities do not have strategies in place which detail appropriate actions or guides with instructions and contacts if asbestos is found or detail risk-management strategies .

In a series of case studies on best practice asbestos management (ASEA & Ithaca Group 2015), one study of the Northern Territory Government's systematic removal of asbestos in 54 remote Aboriginal communities further highlighted further challenges in remote communities including:

- > A lack of accommodation for specialist workers
- > Additional costs including transportation and supplies

- > Climate conditions including interruptions to working schedules by weather events
- > Little knowledge of asbestos in communities which creates elevated anxiety and fear in the community, increasing the need for extensive community consultation, education and awareness-raising.

## 2.2 Illegal dumping

### 2.2.1 The extent and cost of illegal dumping

There is a significant risk of exposure to the community from the improper disposal of ACMs, either inadvertently or deliberate (ASEA & ACIL Allen 2016; ASEA & Desai 2015; ASEA & Ernest & Young 2016a). The illegal dumping of ACMs is not only a risk to the dumpers but also creates a risk of exposure to others. Illegal dumping is also an issue for local governments and private landowners who will often cover the costs of the clean-up (ASEA & Acil Allen 2016).

Most of the metropolitan and regional local governments consulted as part of this research reported that illegal dumping is an issue and a significant cost to them, although the issue is broader than just asbestos. Most use contractors to clean up illegal dumping, including ACMs, but some use their own work crews under the supervision of someone on staff with an asbestos removal licence.

Most of the rural and remote local governments consulted highlighted that illegal dumping does occur in their LGAs but that given the distribution of their population it is generally not an immediate public health risk meaning there is less urgency to clean up. One rural and remote local government said that a bigger issue was the disposal of unwrapped ACMs in the incorrect section of their unmanned waste facility as this causes site contamination that needs to be cleaned up.

In a series of interviews with key stakeholders, it was reported that DIY renovators, some building contractors and some asbestos removalists are the parties responsible for most incidents of illegally dumped ACMs (ASEA & Acil Allen 2016). This is supported by comments from local government staff who participated in interviews and focus groups as part of this research. They also commented that the issue is greater amongst residents with lower socioeconomic status and from countries where there is lower awareness of the risks of asbestos.

However, there is a lack of existing data on the actual costs of illegal dumping to individuals, local governments and state and territory governments and known incidents of illegal dumping are underreported. Illegally dumped ACM's are discovered some time later (often years) which increases the risk of exposure due to the degradation of materials (ASEA & Acil Allen 2016). The time lapse makes it impossible to assess the number of people who have been exposed to ACMs.

Whilst there is limited data on the actual volume of illegally dumped ACMs in Australia, current estimates are at around 6,300 tonnes per annum. The cost of cleaning up illegally dumped ACMs in Australia has been estimated at around \$11.2 million per annum (ASEA & Acil Allen 2016). However, these figures are unreliable as mechanisms for reporting asbestos waste vary by jurisdictions and in many cases are not recorded. Out of the 14 local governments consulted as part of this research only one records the cost of cleaning up illegally dumped asbestos per annum. Cumberland Council in Western Sydney estimated that they spend around \$100,000



per annum on contractors to clean up illegally dumped ACMs. This figure doesn't include the cost of staff to investigate reports of illegal dumping and manage the site until the removalists arrive. Two other metropolitan local governments consulted allocate around \$800,000 per annum for contractors to clean up all illegally dumped materials including ACMs but do not record the costs per class of material.

### 2.2.2 Motivations for illegal dumping

Research suggests that the major motivators for illegal dumping appear to be the high price of tip fees and levies, as well as a general apathy and belief that dealing with ACMs properly is difficult (ASEA & ACIL Allen 2016; ASEA & Picken et al. 2016).

During the focus groups, local government staff identified cost and convenience as structural barriers to the legal disposal of ACMs. State government waste levies introduced to encourage waste minimisation also apply to disposing ACMs. This makes the cost of disposing ACMs upwards of \$250 per tonne in most states and territories with minimum charges of at least \$50. However, this minimum charge can be closer to \$200 in some metropolitan facilities.

Queensland is the only state that does not apply a levy to disposing ACMs at waste facilities. In combination with the low likelihood of prosecution, these levies are a deterrent for commercial operators disposing several tonnes of ACMs from demolition jobs.

The local government staff consulted believe that the inconvenience of disposing ACMs is a larger barrier than cost for residential dumpers. While many local governments operate or host a waste transfer facility or landfill that accepts ACMs many do not. Furthermore, many local government-operated waste facilities will only accept ACMs from local ratepayers and/or require a booking to be made in advance. This means that residents have to travel to other often distant LGAs to dispose of ACMs. For example in Sydney, there are nine facilities that accept household asbestos.<sup>1</sup> These are all in the outer suburbs meaning that residents in many parts of Sydney would have to drive more than an hour to legally dispose ACMs. The situation is similar in other capital cities.

*"Our residents can dispose asbestos at three waste facilities but they are all a least 45 minutes away. This would be the same for residents in lots of LGAs in our city. While our residents seem to do the right thing and we don't have many places to easily dump asbestos, this might not be the case elsewhere as it is a long way to travel."* Staff member from a metropolitan local government.

Staff consulted from regional and rural and remote local governments also view the inconvenience of accessing a waste facility that accepts ACMs as a barrier to lawful disposal, with residents often having to travel long distances to the nearest facility. One regional local government commented that illegal dumping never used to be an issue but they are seeing an increase now that their waste management facility no longer accepts asbestos. Residents now have to travel more than 30 minutes to a neighbouring LGA to legally dispose ACMs. Another

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<sup>1</sup> According to the NSW Environmental Protection Authority website [www.epa.nsw.gov.au/managewaste/house-asbestos-land.htm](http://www.epa.nsw.gov.au/managewaste/house-asbestos-land.htm).

regional local government consulted faces a similar scenario with residents having to travel to waste facilities in neighbouring LGAs.

*“We used to accept household asbestos at our landfill. But now it is full and residents have to travel more than 30 minutes to the nearest town with a landfill that accepts asbestos. We are now seeing more asbestos illegally dumped in our LGA.”*

*“We don’t have a waste facility that accepts ACMs in our LGA but two of our neighbours do. Still we are finding asbestos illegally dumped. Most is wrapped in plastic so it is being handled appropriately but just not disposed of appropriately.”*

*“We have a landfill that accepts asbestos but our LGA is large and there are plenty of dunes and bushland. It is easy to dump waste without getting caught.”*

Staff from three regional local governments

Recent analysis of the National Asbestos Waste Facilities Database by ASEA confirms the potential shortage of waste facilities. According to ASEA’s analysis there are 273 waste facilities across Australia that accept ACMs. At best this is one for every two LGAs. However, the distribution is not even by state or territory (Table 1). While the data suggests that most LGAs in Queensland (86%) and more than half in NSW (62%) have a waste facility that accepts ACMs, this is not the case in other states. Although the precise locations and proximity to LGAs is not available in this data, it does suggest that residents in many LGAs outside of Queensland have to travel outside of their LGA to legally dispose of ACMs.

TABLE 1: WASTE FACILITIES THAT ACCEPT ACMs

State/territory	Waste facilities that accept ACMs	LGAs	No. per LGA
<b>NSW</b>	79	128	0.62
<b>NT</b>	3	17	0.18
<b>QLD</b>	66	77	0.86
<b>SA</b>	23	74	0.31
<b>TAS</b>	9	29	0.31
<b>VIC</b>	27	79	0.34
<b>WA</b>	64	139	0.46
<b>Total</b>	271	543	0.5

Source: ASEA analysis of the National Asbestos Waste Facilities Database

Note: The ACT has two waste facilities that accept ACMs. These have not been included in the analysis as there are no local governments in the ACT.

Another issue highlighted by two rural and remote local governments consulted is the inconvenience of properly wrapping ACMs prior to disposal. These local governments accept household and commercial asbestos (in one case for free) at one of their landfills but these are unmanned. They find substantial amounts of asbestos unwrapped and not dumped in the designated part of the landfill. Waste management staff has to relocate the waste and decontaminate the area where the ACMs were incorrectly dumped.

The majority of homeowners who participated in the online discussion forums did not know where they could dispose of asbestos. This suggests that this information is not widely known although most did indicate that if needed they would look at their local government website for more information. The groups were also unaware of the cost of disposing ACMs. During the course of the discussion forums, several participants investigated this issue and were surprised by the cost.

It has also been reported that local governments find it difficult to enforce regulations to prevent the illegal dumping of ACMs. The potential of large fines is not an effective deterrent and the lack of facilities and high disposal fees is often prohibitive (ASEA & Acil Allen 2016). During focus groups with local governments, environmental health staff commented that it is extremely difficult to gather the necessary visual evidence to prosecute illegal dumpers. Despite illegal dumping being an issue for almost all of the 14 local governments consulted, none have ever attempted to prosecute someone for illegal dumping citing the evidence requirements as a disincentive given legal costs.



## 3 The current role of local government in community asbestos safety

### 3.1.1 The roles and responsibilities of local governments

Previous research positions local government as having an important role in improving asbestos safety. Other literature extends this by suggesting that of all levels of government, local government has the most important role in the regulation, collection and management of hazardous waste materials such as ACMs (Hyder Consulting 2011; NSW Ombudsman 2010). Local government is highlighted as the tier of government that is closest to the community and its housing decisions, and is the level of government most aware of home renovation and re-developments and waste infrastructure in their LGAs (Beer et al. 2014). Local governments are also often the first point of contact by the general public for information including about asbestos (NSW Ombudsman, 2010).

In general, local governments collaborate with other levels of government as well as non-government organisations and private business in six main areas relating to asbestos (NSW Ombudsman, 2010):

- > Management of asbestos in public spaces and council-owned property, assets and buildings
- > Regulation of activities involving potential exposure to asbestos
- > Education and advice to the community
- > Land-use planning responsibilities
- > Waste management and regulation
- > Educating employers about how to reduce asbestos exposure of their workers.

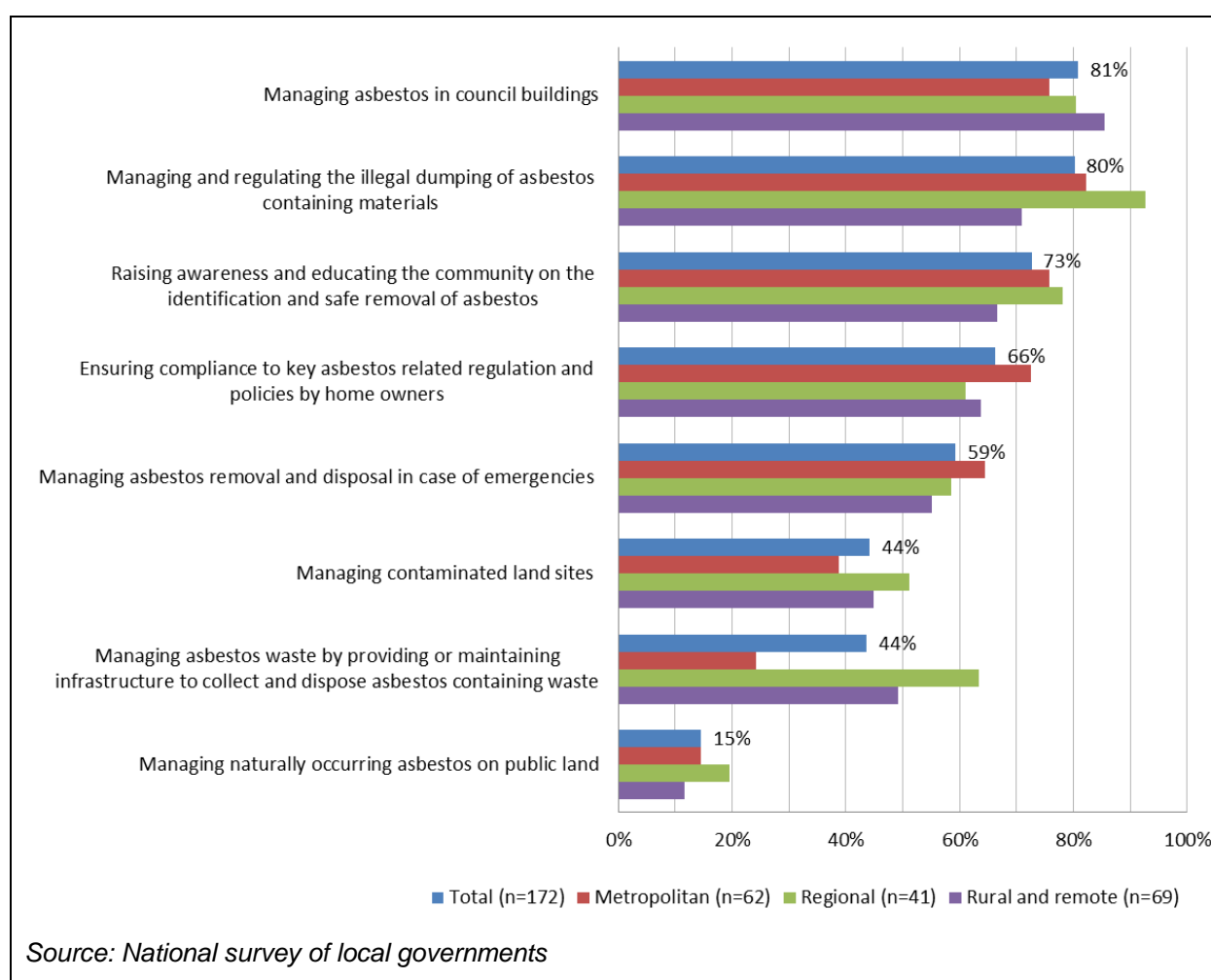
The national survey of local governments as part of this research shows that the level of responsibility assumed for each of these varies across local governments. Figure 1 shows that the majority of local governments that responded to the survey are assuming responsibilities for managing asbestos in their buildings (81%), managing and regulating the illegal dumping of ACMs (80%) and raising awareness and educating the community around asbestos safety (73%). More than half also assume responsibilities around ensuring compliance by homeowners to asbestos regulations (66%) and managing asbestos removal during emergencies (59%). The survey indicates that less than half of local governments are assuming responsibility to provide or maintain infrastructure to collect and dispose ACMs (44%) which has been highlighted by previous research as a contributing factor to illegal dumping (NSW Ombudsman 2010).

Respondents from regional local governments were the most likely to report that managing and regulating the illegal dumping of ACMs (93%), and providing or maintaining infrastructure to collect and dispose ACMs (63%) are responsibilities of their local government. Metropolitan local governments were the least likely to report the latter (24%). Eighty per cent of respondents from regional local governments and 64 per cent from rural and remote local governments indicated that their local government provides or maintains infrastructure to collect and dispose ACMs. This could reflect the presence of centralised waste facilities in metropolitan areas that are accessible to residents from multiple LGAs. Respondents from metropolitan local

governments were the most likely to report that ensuring compliance to key asbestos related regulation and policies by home owners is their responsibility (73%). This presumably reflects the distribution of DIY home renovation.

The pattern of reported local government responsibilities varies between states (see Table A7 in Appendix G). Most obvious is that local governments in South Australia appear to assume fewer responsibilities outside of managing asbestos in council buildings than local governments elsewhere. In particular, only 24 per cent of South Australian local governments that responded to the survey enforce compliance amongst homeowners to asbestos related regulation and policies, and just 12 per cent manage a waste facility that accepts asbestos. Local governments in Queensland were by far the most likely to report managing a waste facility that accepts asbestos (78%). The other notable variation is that local governments in Victoria (63%) and South Australia (59%) are the least likely to manage and regulate the illegal dumping of ACMs. Differences also emerged in the pattern of responsibility for managing asbestos removal and disposal in the case of emergencies but this appears to reflect the prevalence of natural disasters such as cyclones and floods.

FIGURE 1: PERCENTAGE OF LOCAL GOVERNMENTS ASSUMING RESPONSIBILITIES FOR ASPECTS OF ASBESTOS SAFETY



Local governments that responded to the survey were also asked to rate the importance of their various responsibilities for managing asbestos in their LGA (see Table A8 in Appendix G). Managing and regulating illegal dumping (80%) was rated as the most important responsibility followed by providing residents with details about waste facilities or landfills that accept ACMs (69%). Only 55 per cent of respondents rated educating and raising overall awareness on residential asbestos safety as extremely or very important. Less than half rated providing residents with information about licenced asbestos removalists (44%) and providing infrastructure for disposing of asbestos containing waste (48%) as extremely or very important.

The combined data on current responsibilities and ratings of importance suggests that local governments primarily view their most important role in asbestos management as managing asbestos in their own facilities and supporting the legal disposal of ACMs. Although almost three-quarters of local governments considered raising awareness and education on the identification and safe removal of asbestos as a responsibility of their local government, this appears to be less important.

### 3.1.2 Actions by local governments to improve asbestos safety

Survey respondents were also asked about the actions their local governments are delivering to support DIY home renovators handle asbestos safely. Figure 2 shows that the most common actions local governments are taking are:

- > Distributing educational material relevant to DIY renovators or home owners (63%)
- > Providing a dedicated section on asbestos safety and management on their websites (42%)
- > Organising or facilitating information events or awareness days (20%)

Twenty-two per cent of respondents indicated that their local governments do not do any of the actions presented in the survey.

The responses showed that metropolitan and regional local governments are more likely than rural and remote local governments to provide a dedicated section to asbestos safety and management for residents on their websites and organise or facilitate information events or awareness days. The former reflects the findings from the review of local government websites.

Regional local governments are the most likely to distribute educational materials relevant to DIY renovators and homeowners. However, the survey did not capture whether this is merely providing brochures and factsheets at customer service centres and other locations in the community, providing information in community newspapers and newsletter, or more targeted distribution to at-risk cohorts.

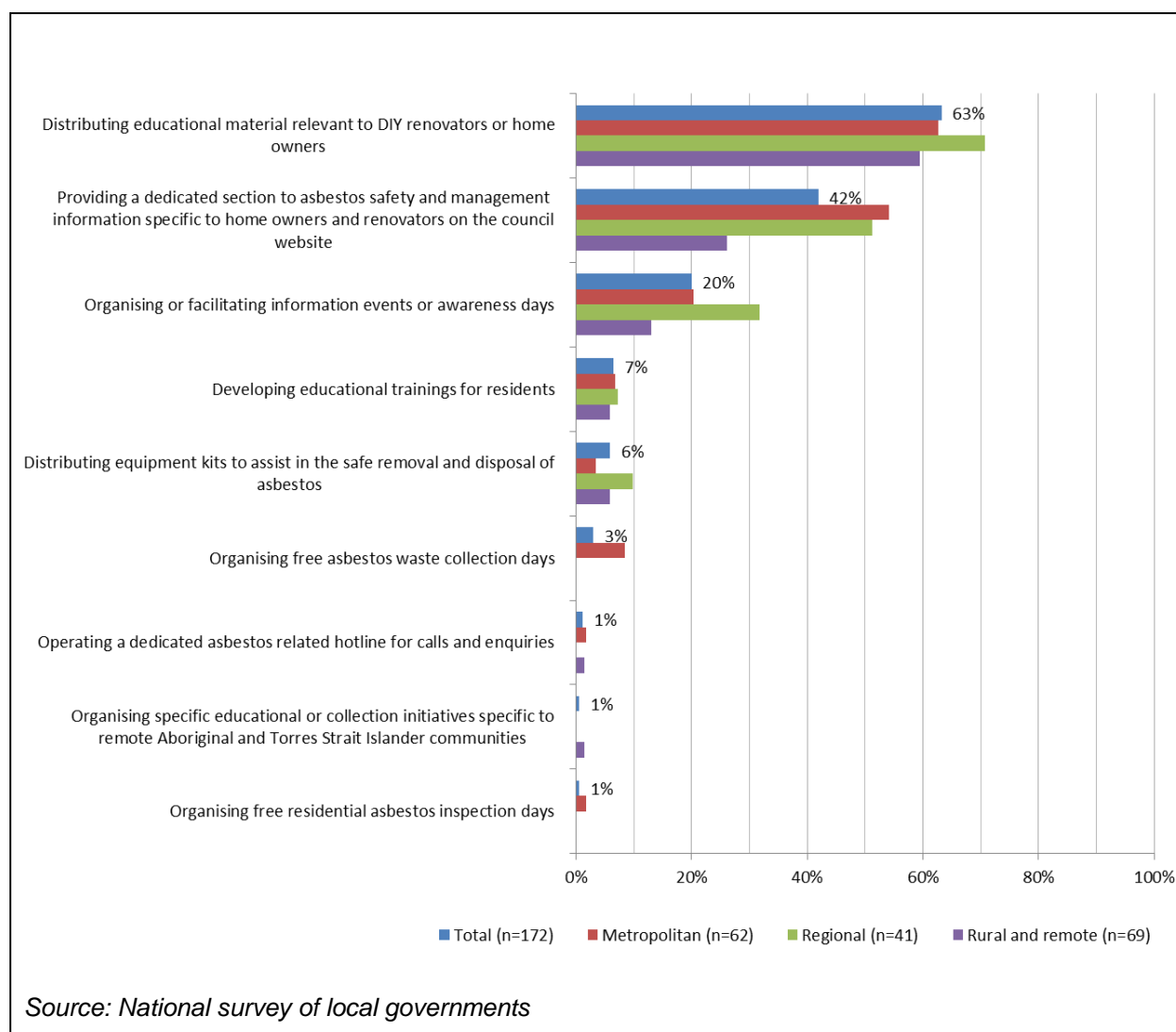
The review of local government websites suggested that a much lower percentage have a dedicated webpage for asbestos than indicated by the survey. This could reflect bias in the sample that responded to the survey. Alternatively, respondents could have interpreted this question as asking whether their local government has information about asbestos on their websites even if there is not a main dedicated asbestos page. Either way, more than half of all local governments appear not to have a webpage dedicated to asbestos safety reflecting the findings from the review of local government websites that information about asbestos is fragmented (see section 4).

The pattern of actions to raise awareness and knowledge varies across states. For example:

- > Local governments in NSW (61%) and Tasmania (50%) are the most likely to have a webpage dedicated to asbestos safety, while local governments in South Australia (18%) are the least likely.
- > Local governments in Queensland are by far the most likely to distribute educational materials to homeowners (89%), while local governments in NSW are the most likely to organise asbestos events or awareness days (32%). Only eight per cent of local governments in Tasmania hold such events or days.
- > Local governments in South Australia and Tasmania are the only ones that did not report distributing asbestos removal kits.

(See Table A9 in Appendix G).

FIGURE 2: PERCENTAGE OF LOCAL GOVERNMENTS DELIVERING ACTIONS TO SUPPORT DIY RENOVATORS TO HANDLE ASBESTOS SAFELY



In combination, the national survey and review of local government websites identified 108 local governments delivering one or more of the following five categories of asbestos-related initiatives:

- > Asbestos testing or inspection programs (52)
- > Awareness events or information sessions on asbestos safety and management (39)
- > Asbestos removal/disposal program or service (28)
- > Providing asbestos removal/disposal kits (16)
- > Initiatives related to illegal dumping of asbestos (4)

The identity of local governments delivering each type of initiative can be found at Appendix H. This is almost certainly an under-representation of the number of local governments delivering these types of initiatives. It is likely that not all local government websites contain information about the asbestos safety initiatives local governments are implementing and almost 70 per cent of local governments did not respond to the survey. Nonetheless it does indicate that a substantial number of local governments are delivering initiatives to improve residential asbestos safety, most commonly asbestos testing or inspection programs.

Case studies of local governments delivering various community asbestos safety campaigns and initiatives are presented in section 7 of this report.

## 4 Communication with homeowners about asbestos safety

### 4.1 The role for local governments to communicate with homeowners about asbestos safety

Local governments are also often the first point of contact by the general public for information, including about asbestos (NSW Ombudsman, 2010). They provide their communities information and resources about a wide range of topics including asbestos and related areas such as building and demolition processes and waste management. Much of this information is distributed via websites, social media and customer service centres.

A key theme in previous research is the need for communication, initiatives and raising awareness of asbestos. As described previously in this report, it appears that the general public, and to some extent tradespeople, have limited awareness and knowledge around asbestos safety.

The previous section describing responses to the national survey confirms that local governments are playing a role in raising awareness about asbestos safety in the community by disseminating educational information. However, the challenge of raising awareness is highlighted by previous survey data with only 1 in 10 Australians indicating interest in seeking additional information about asbestos, including how to identify and remove asbestos. This suggests that the community do not see this as relevant to them personally (ASEA & EY Sweeney 2016a).

Other related findings from the above research are (ASEA & EY Sweeney 2016a):

- > Tradespeople are more interested in receiving information about asbestos, suggesting that there is an opportunity to develop and implement training courses and material for this group considering their high risk of exposure.
- > Older people are more interested in learning how to dispose of asbestos safely than younger people. Generally, they have a higher level of awareness and are more willing to pay for specialist advice on asbestos compared with younger people.

Whilst tradespeople and older people are the most interested in developing a better understanding of asbestos, many DIY home renovators are under 30 and have low awareness around asbestos safety (ASEA & EY Sweeney 2016b). The fact that this cohort is large in number, at high risk of exposure to asbestos and appears largely uninterested in seeking additional information about asbestos, highlights the major challenge to improving residential asbestos safety.

These findings point to local governments being key stakeholders in raising awareness around asbestos safety, particularly amongst DIY renovators who are at high risk of exposure. Local governments have contact with homeowners at several points including the registration for and issuing of council rates notices, and in the case of substantial home renovations' issuing development approval. Through these processes local governments should be aware of buildings likely to contain asbestos and at least a portion of development or renovation on these buildings. This creates an opportunity for local governments to directly target 'at risk' residents with information about asbestos safety.



In the national survey, local governments themselves rated DIY home renovators as their most important stakeholders to improve community asbestos safety, with 88 per cent rating them as highly important. Licenced asbestos removalists (84%), tradespeople (65%) and licenced assessors (60%) were also rated as highly important. New home buyers were rated as the least important (36%). These patterns were the same irrespective of state or territory, or remoteness.

This suggests that regulatory contact with homeowners at the point they are planning or commencing renovations is viewed by local governments as more important than educating homeowners about asbestos safety at the point of purchase or rates registration. This seems at odds with the realities of the development application process where a development application is not required unless home renovations involve major demolition or structural or load bearing modifications. This means that the majority of home renovations do not require a development application so will go unnoticed by local governments. Given this, effective more general community education about asbestos safety would seem important to reduce the risks of exposure.

## 4.2 Current communication around asbestos safety

### 4.2.1 The nature of current communication

It has been suggested that the apparently low interest in seeking additional information about the management and safe handling of asbestos may reflect the complexity of the information and the technical language used when explaining asbestos risks. It has been suggested that the complexity and volume of the information can be challenging for audiences who may lack the technical literacy to navigate it (ASEA & Desai 2015).

Key stakeholders in communication to raise awareness about asbestos are diverse and include Commonwealth and State and Territory agencies, local government and non-government organisations. The lack of a coordinated approach with a cohesive set of messages, strategies and efforts to target stakeholder engagement is seen as a barrier to initiating behaviour change around asbestos safety (ASEA & Desai 2015).

Based on their findings, ASEA and Desai (2015) made recommendations to improve the effectiveness of communication and raising awareness around asbestos including:

- > Developing coherent key messages through research, evaluation and audience testing. Narrowing the number of messages available in the sphere is key to establishing a more effective message.
- > Developing a pilot communications research plan for the efficacy of social media for asbestos awareness raising efforts.
- > Developing ASEA as the key conduit for advocacy and future asbestos campaigns (although the research did identify low awareness of ASEA).
- > Drawing on storytelling as a method for engaging online audiences.
- > Using the internet and television which are considered the best ways to reach DIY renovators. However, social media is considered effective to reach younger people who may have less knowledge and understanding of asbestos.

As summarised in section 3 of this report, the national survey suggests that the most common ways local governments are communicating with residents about asbestos safety are:

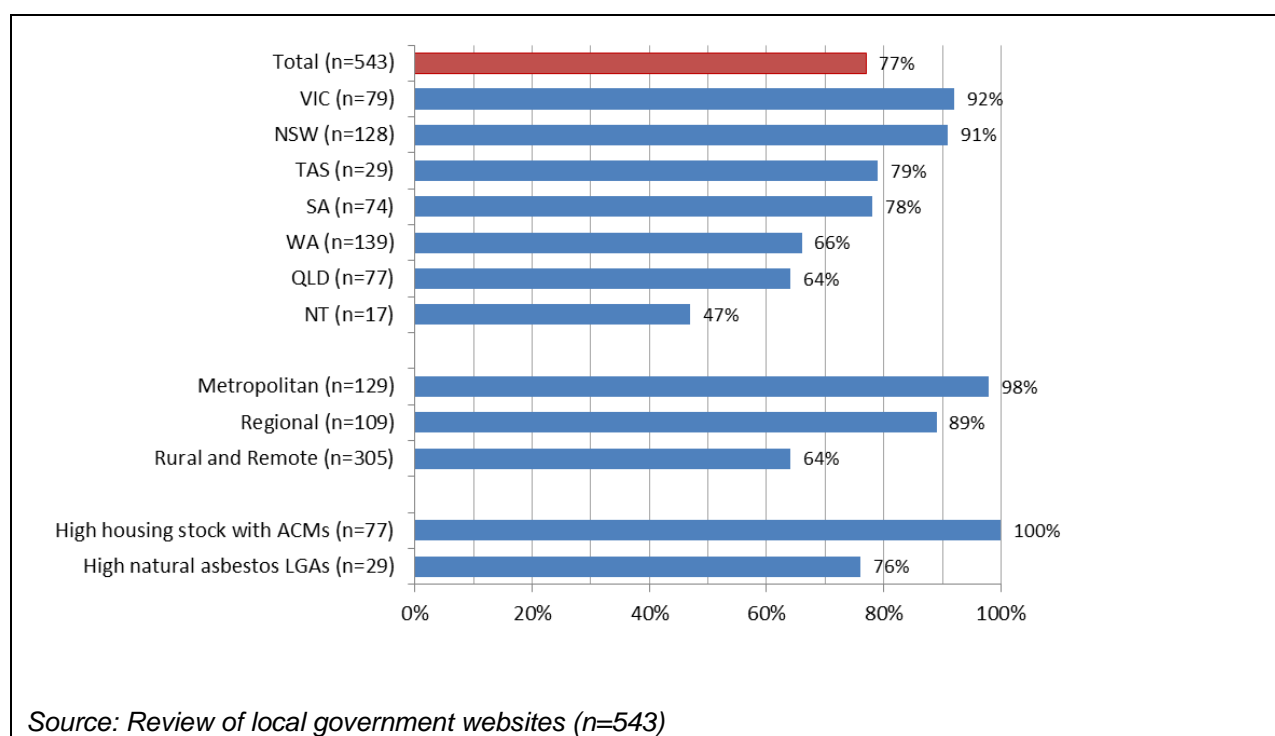
- > Distributing educational material relevant to DIY renovators or home owners (63%)
- > Providing a section/s on asbestos safety and management on their websites (42%)
- > Organising or facilitating information events or awareness days (20%)

This was confirmed during interviews and focus groups with local governments where only a few were going beyond disseminating information via their websites, newsletters or local newspapers, or reactively in response to a complaint or notification. Most of the local governments consulted are more active with these activities during Asbestos Awareness Month.

#### 4.2.2 The types of information about asbestos on local government websites

The review of local government websites revealed that most local governments have some information about asbestos on their website (77%). Victoria (92%) and New South Wales (91%) have the highest percentage of local governments with references to asbestos on their websites while the Northern Territory (47%) has the least (Figure 3). Nearly all metropolitan (98%) and regional (89%), but only 64 per cent of rural and remote local governments have references to asbestos on their websites.<sup>2</sup> Local governments with high predicted amounts of housing stock containing asbestos containing materials (ACMs) in their LGAs all have references to asbestos on their websites as do three quarters of those with high amounts of natural asbestos.<sup>3</sup>

FIGURE 3: PERCENTAGE OF LOCAL GOVERNMENTS WITH INFORMATION ON ASBESTOS



<sup>2</sup> Local governments were classified according to the classification system outlined in: Australian Government Department of Infrastructure and Regional Development 2013, Australian classification of local governments, [http://regional.gov.au/local/publications/reports/2002\\_2003/appendix\\_f.aspx](http://regional.gov.au/local/publications/reports/2002_2003/appendix_f.aspx)

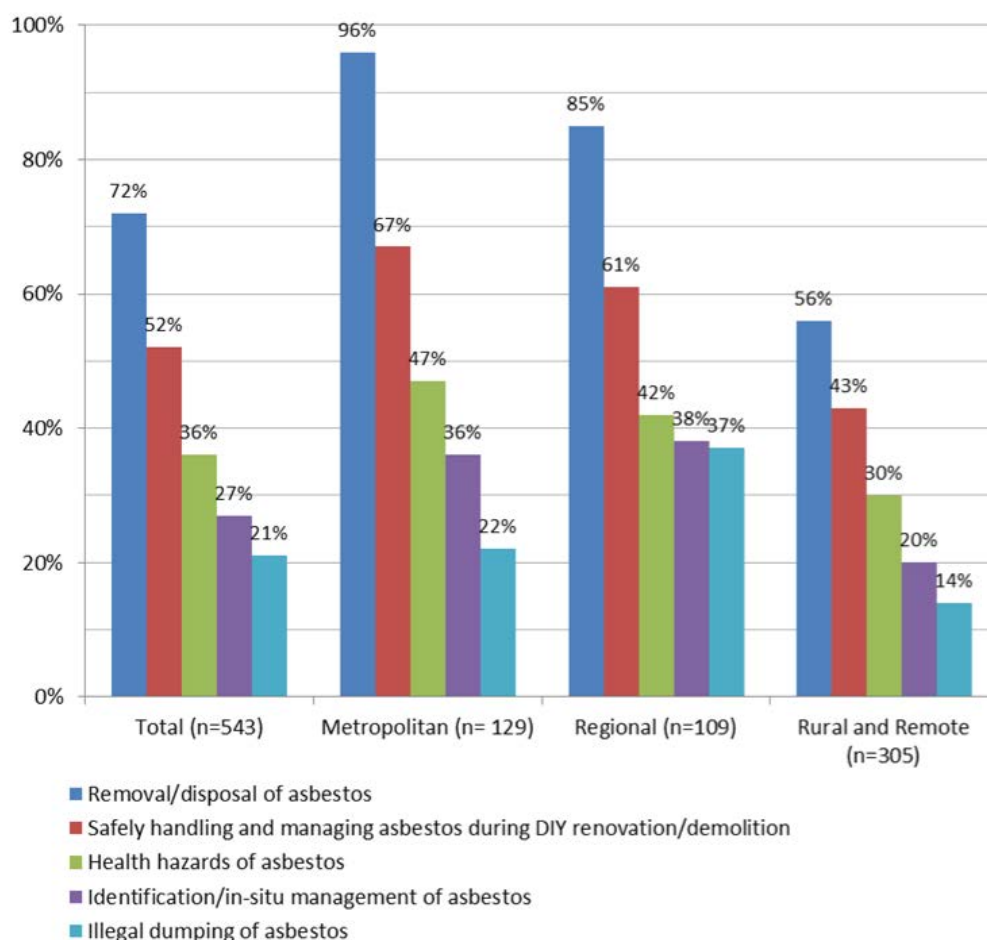
<sup>3</sup> Local government areas with predicted high amounts of housing stock with ACMs and high amounts of naturally occurring asbestos is based on data provided by ASEA.



Figure 4 shows that the most common asbestos-related information provided on local government websites is about removing and/or disposing of asbestos (72%) followed by information about asbestos safety and management during DIY renovations and demolition (52%). The least common asbestos-related information provided is information specifically about illegal dumping (21%).

This pattern holds irrespective of whether a local government is metropolitan, regional or rural and remote. The websites of metropolitan local governments are more likely to contain information about all asbestos safety topics than regional or rural and remote local governments with the exception of illegal dumping. Regional local governments (37%) are the most likely to have information about illegal dumping on their websites. This suggests that illegal dumping is considered a bigger issue in regional LGAs than in metropolitan and rural and remote LGAs.

FIGURE 4: PERCENTAGE OF LOCAL GOVERNMENT WEBSITES CONTAINING INFORMATION ABOUT VARIOUS ASBESTOS-RELATED TOPICS



Source: Review of local government websites (n=543)

The pattern of asbestos-related information on local government websites varies by state and territory. For example, while local governments in Victoria are the most likely to have information relating to removal/disposal of asbestos on their websites (87%), they are the least likely to have information about identifying and managing asbestos *in situ* (5%). Local governments in Tasmania are quite likely to present information about the removal/disposal (72%) and safe handling of asbestos during home renovations (62%), but rarely provide information about the health risks of exposure to asbestos (14%) and illegal dumping (3%). Local governments in the Northern Territory only appear to be providing information about removal/disposal (41%) and in two cases safely handling ACMs (6%).

In general, local governments in Queensland, Western Australia and especially the Northern Territory are less likely than all other local governments to have information related to asbestos on their websites. In contrast; local governments in NSW are presenting the most comprehensive range of asbestos-related information on their websites.

Importantly, local governments with a high amount of housing stock containing ACMs or high amounts of natural asbestos in their LGAs are more likely to have information about asbestos on their websites than other local governments. In particular, the websites of local governments with a high amount of housing stock containing ACMs in their LGAs nearly all have information about removing and disposing of asbestos and three quarters have information about safely handling asbestos during renovations.

#### 4.2.3 The effectiveness of communication by local governments about asbestos safety

Although there are no reports about the effectiveness of local government communication about asbestos safety, the national survey suggested that local governments themselves don't widely see their websites or distributed materials as effective. Only 60 per cent of those distributing educational material for homeowners rated them as at least moderately effective, while only 51 per cent rated their websites as at least moderately effective.

The limited effectiveness of communication by most local governments about asbestos safety is confirmed by the review of local government websites and the online discussion forums with homeowners.

##### *Local government websites*

The review of local government websites suggests that local governments themselves are contributing to the fragmented nature of information about asbestos available to the community. Across local government websites information on asbestos is often found on multiple webpages devoted to different divisions or departments (Figure 5).

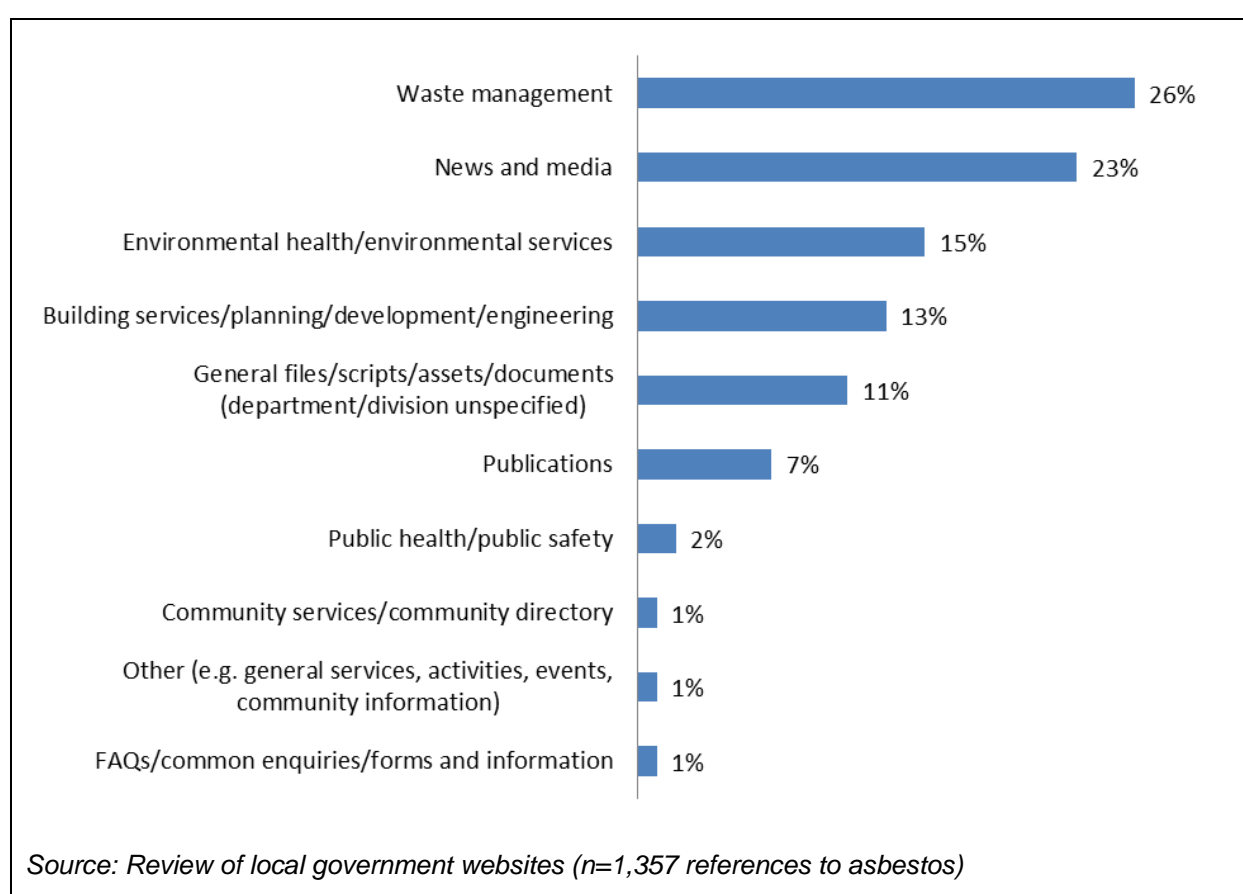
Information about asbestos is most commonly located in webpages that provide information about waste management (26%) but is also found under Environmental Health/Environmental Services (15%), Building Services/Planning/Development/Engineering (13%) and in to a lesser extent Public Health//Public Safety (2%).

Excluding references to asbestos in news and media and general files and scripts, 184 local governments (34% of all local governments and 44% of local governments that provide information about asbestos) provide information about asbestos across multiple webpages. This is most common for local governments with high amounts of housing stock likely to contain

asbestos in their LGAs (62%). This could make it complicated for DIY home renovators to easily access all of the relevant information required for them to safely handle and dispose of ACMs.

Some local governments have organised their information about asbestos in dedicated webpages to make it easier for people to find the relevant information. These webpages provide standalone information about a range of asbestos-related topics, and links to other parts of their website and external sources. However, only 80 local governments have such pages and 47 are in NSW. Only 17 local governments with high amounts of asbestos in housing stock within their LGAs (22%) maintain a dedicated asbestos webpage when theoretically this is where there is the greatest need to easily access information.

FIGURE 5: LOCATION OF ASBESTOS-RELATED INFORMATION ON LOCAL GOVERNMENT WEBSITES



Building on the findings presented above, the review of local government websites revealed four types of websites in the context of providing asbestos-related information:

1. Local government websites that do not contain any information about asbestos (23%). These are most commonly the websites of rural and remote local governments (36%).
2. Local government websites that do not have a dedicated asbestos webpage and only provide regulatory information on asbestos in the context of waste management without providing specific information about how to safely handle ACMs.

3. Local government websites that do not have a dedicated asbestos webpage but provide asbestos information across multiple webpages devoted to different divisions or departments, publications or media releases. This is the most common way that local governments provide online information to their communities on asbestos. The only way for the general public to access all of this information is to search for the term 'asbestos' in the search bar.
4. Local government websites that organise information about asbestos around a dedicated asbestos webpage. These webpages have standalone asbestos-related information and resources for their community, and links to relevant information on other internal and external webpages. These external links are most commonly to asbestos-related information provided by their state government (refer to Appendix I).

Many homeowners that participated in the online discussion forums viewed their local government's website for information about asbestos safety for the first time during the course of the online forums. Most stated that information they found was quite useful but their comments further highlighted the variable nature of local government websites around asbestos.

*"I think the information provided on the council website is fairly informative and certainly a good place to start."* Homeowner in regional QLD

*"The information (on council website) is very useful, but I think they could update more regularly. I found google search better."* Homeowner in regional NSW

*"I looked on my council's website and there is a lot there about asbestos. There was various pdf's there and I found the best one was the fact sheet with FAQ's. Those questions were just like the ones I would ask. This information is totally useful and seems very comprehensive going from what is asbestos to health risks and occupational health risks. So far as I've looked around this is the best plain language information I have seen so far and if not for this forum I didn't even know it was there."* Homeowner in regional SA

However, some felt that the information is mainly useful for how to dispose of asbestos and not how to safely handle it.

*"I looked at my local council website and couldn't find anything about asbestos removal on it, other than it is not permitted in bins or our hard rubbish collection."* Homeowner in regional VIC

*"Council offers standard information. It is useful for disposing. I find YouTube and google more useful to understand how to safely remove asbestos."* Homeowner in metropolitan NSW

*"I just did a quick search for info on my council web page and it did not have much info on asbestos. Maybe I wasn't looking in the right place. I found the fees to dispose of asbestos but so far have not found any general info on asbestos. The virtual assistant was taking too long, so I gave up looking."* Homeowner in regional QLD

With information on asbestos so widely dispersed on most local government websites it is difficult for residents to locate a comprehensive package of information that covers the health risks of asbestos, how to identify and safely remove asbestos and where and how to legally dispose ACMs. This highlights the benefits of local governments having a dedicated asbestos webpage to organise all of the important information that promotes community and residential asbestos safety.

#### *General communication about asbestos safety*

At least half of the homeowners that participated in the online discussion forums stated that besides paying their rates they rarely contact their local government. For the remainder who more frequently contact their local government the five main reasons are:

- > Requesting garbage collection or for a general waste related enquiry
- > Enquiring about building permits or for building-related advice
- > Making complaints related to illegal car parking
- > Animal/pet registrations or complaints
- > Requesting tree trimming or the removal of fallen debris

The majority also stated that they currently receive periodic local government newsletters (generally quarterly), flyers in rates notices, annual council rubbish collection notices and that their local government provides information in the local newspaper (mainly about what's on).

However, most have no recollection of ever obtaining any information about asbestos from their local governments and have not requested any.

*"I am not aware of information about asbestos that my council provides."* Homeowner in metropolitan NSW

*"I haven't noticed any information about asbestos coming from my local council but then I wasn't really looking for it. I'm sure I'd be able to find it on their website if I'd need it."* Homeowner in regional QLD

Most participants are also unaware of any actions their local government, or anyone else, is delivering to help people handle asbestos safely. They seem to assume that their local government only provides information on asbestos or support when directly asked.

*"I have been unable to find anything on my local council website; I really have no idea what they do."* Homeowner in regional VIC

*"I didn't know that my local government can help me safely handle asbestos. Now that I know I will try to call my council and ask them what can they do to help me in the future regarding handling the asbestos."* Homeowner in regional NSW

*"I have to admit that I have no idea what services they provide. It makes me wish that there was a bit of advertising or asbestos being covered in the quarterly magazine. I would not have known to approach them. I would have rung a company first."* Homeowner in regional VIC

Only a few of the participants are aware of the ways in which their local government are providing information to help residents handle asbestos safely. They indicated that they had seen local government posters or signage around their LGA or seen or heard a local government advertisement about asbestos on the television, radio or local newspaper. The homeowners that are most aware come from Wollongong City Council in NSW and Logan City Council in Queensland. It was noticeable that these participants have more general knowledge on the health hazards of asbestos and other aspects of asbestos safety compared to participants from other LGAs. At least in the case of Wollongong City Council, this could be a result of active campaigning around asbestos safety. Wollongong City Council won a 'Betty Award' in 2016 for their comprehensive asbestos awareness campaign.

Although the homeowners selected to participate in the discussion forums came from a small number of LGA, they were selected based on evidence that their local governments deliver asbestos safety campaigns and/or other asbestos safety initiatives. However, this suggests that communication by local governments about asbestos safety and related services are ineffective.

#### 4.3 Homeowner preferences for communication about asbestos safety

Homeowners who participated in the online discussion forums were asked to complete a pre-survey to elicit their communication preferences around aspects of asbestos safety and with various levels of government (refer to Appendix E). For each question, the preferences of each respondent were ordered from highest to lowest and scored on an ordinal scale from 8 (or 7) to 1. Scores were added across all respondents and then ranked. For each question, the option with the highest rank across all respondents was assigned a value of 1. The other options were score based on the ratio of their total score across all participants to that of the highest ranked option.

Figure 6 shows that building certifiers are the most trusted source of information about the health risks of exposure, how to identify asbestos and how to safely handle ACMs. When compared with the Commonwealth (or federal) Government, friends-or-family and hardware stores, builders/tradespeople are the most trusted source of information about disposing ACMs. This suggests an important and potentially effective role for building certifiers and builders/tradespeople to provide homeowners with information about asbestos safety.

Although not the most trusted source, local governments appear to be a trusted source for most information about asbestos safety, generally only ranking around 0.15 scaled points below



building certifiers and builders/tradespeople and equal or above other levels of government. Given the widespread reach of local governments, this suggests that they too are an important source of information about asbestos safety.

FIGURE 6: TRUSTED SOURCES FOR INFORMATION ABOUT ASBESTOS SAFETY

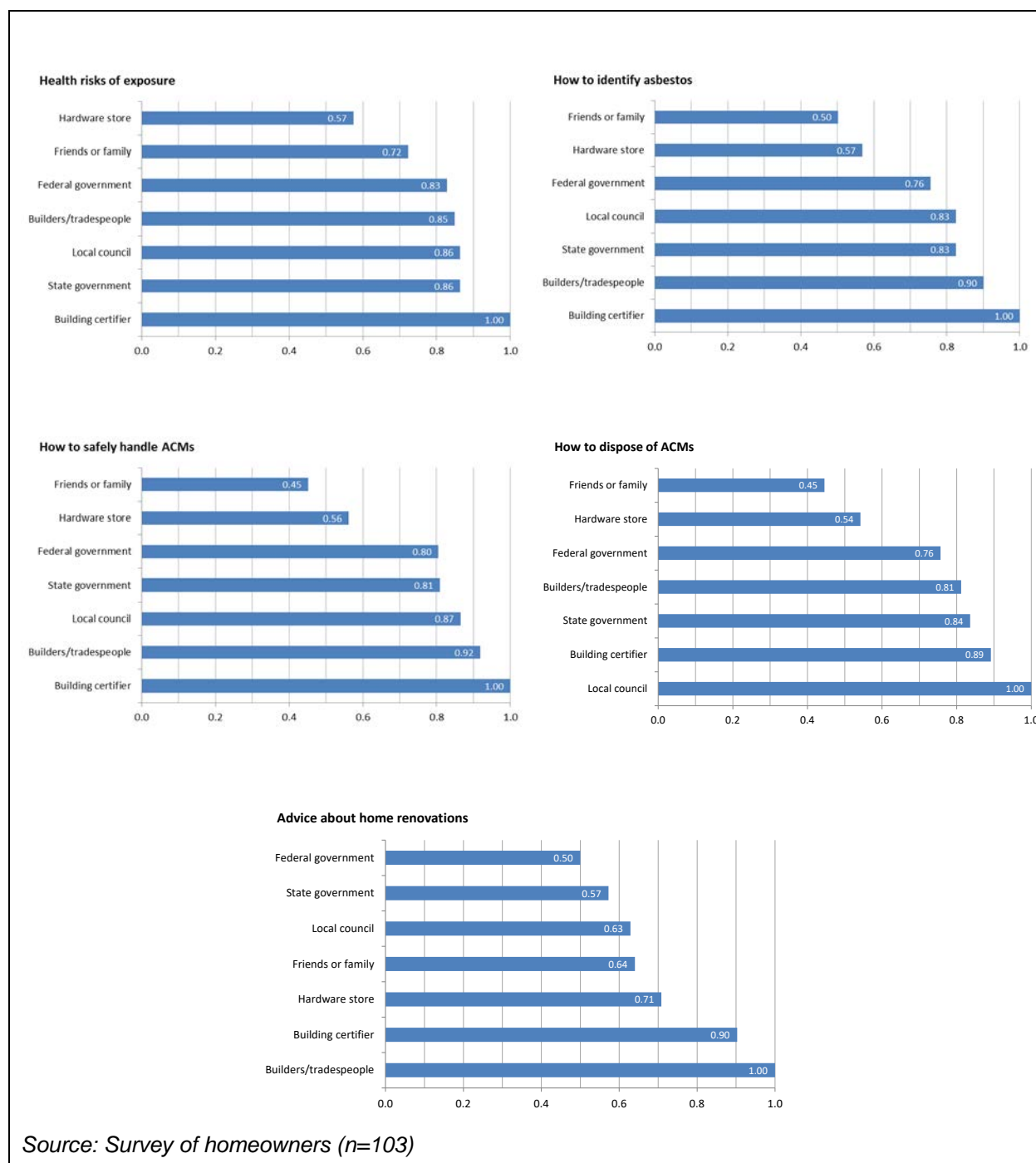


Figure 7 shows that homeowners prefer (or would prefer) to receive information about the practical handling and disposal of asbestos in workshops and information sessions. This is not a preferred method for receiving information about the health risks of asbestos where the internet

and television are more preferred options. In general, the scores suggest that the internet, face-to-face advice, television and mail/post are accepted sources of information about all aspects of asbestos safety. Radio, social media and telephone/SMS are not as widely accepted.

FIGURE 7: COMMUNICATION PREFERENCES FOR INFORMATION ABOUT ASBESTOS SAFETY

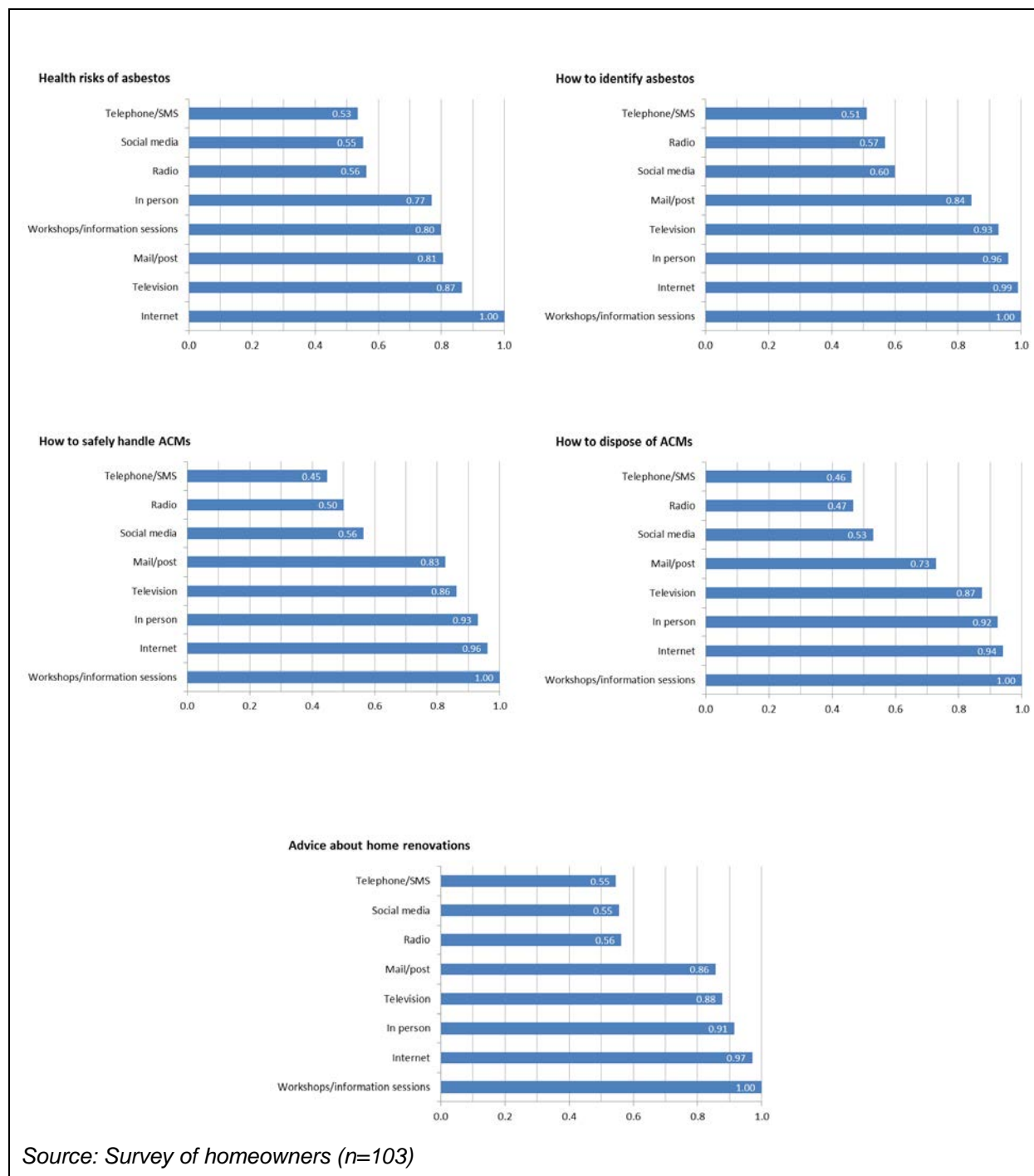
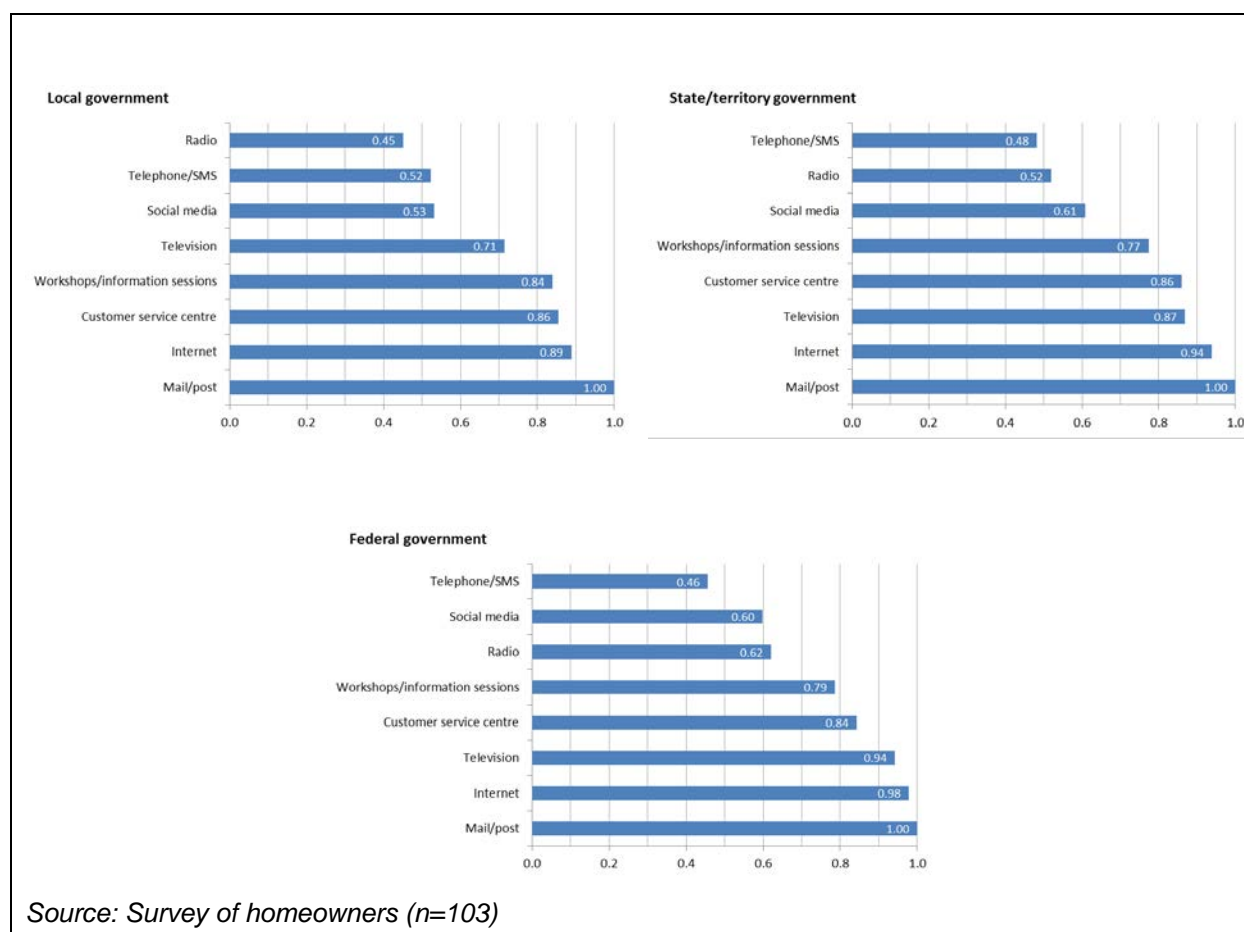


Figure 8 shows that homeowners prefer communication from all levels of government, including local government, by mail/post followed by the internet. Television also ranked highly for communication with state, territory and Commonwealth governments. Customer service centres



are also a popular way for homeowners to receive information from local governments. Importantly, given the preference for homeowners to receive information about asbestos safety, workshops and information sessions also scored highly as a preferred source of communication from local government.

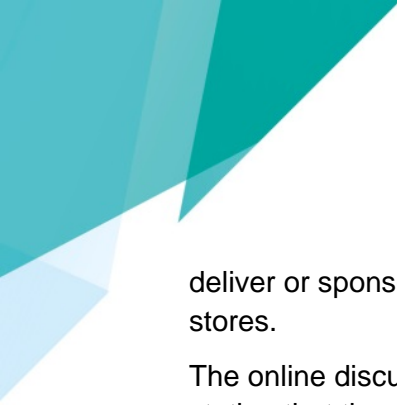
FIGURE 8: PREFERENCES FOR COMMUNICATION STYLES WITH DIFFERENT LEVELS OF GOVERNMENT



Local government websites and mail outs are the most preferred source in terms of how homeowners would like to receive information on asbestos safety from local governments. Together the survey responses indicate a role for local governments in providing information about all aspects of asbestos safety. Although local governments are not always the most trusted source of information, they rank highly amongst homeowners and generally above other levels of government.

This makes it important that local governments present comprehensive online information about asbestos safety that is easy to find. Local governments could also consider using existing mail outs such as rates notices or local newsletters to deliver comprehensive information about asbestos.

The data suggests that local government organised or sponsored workshops and information sessions could also be effective for delivering information about asbestos safety. Although hardware stores do not appear to be a trusted source, they are nonetheless often convenient and frequented by DIY home renovators. This suggests an opportunity for local governments to



deliver or sponsor asbestos safety workshops and information sessions at major hardware stores.

The online discussion forums with homeowners reflected the survey with most homeowners stating that they would prefer to receive general information on asbestos from their local government via brochures or fact sheets in the mail/post. They also stated that television and radio may also play an important role in providing information on asbestos safety but did not link this to local government. However, for detailed information on how to actually handle, remove and dispose asbestos, homeowners would prefer to have face-to-face conversations with an expert or local government officer through a meeting or an information session or workshop. Some participants in the relatively younger age bracket (20-40 years) also demonstrated a preference for receiving information from their local government via e-mail or social media.

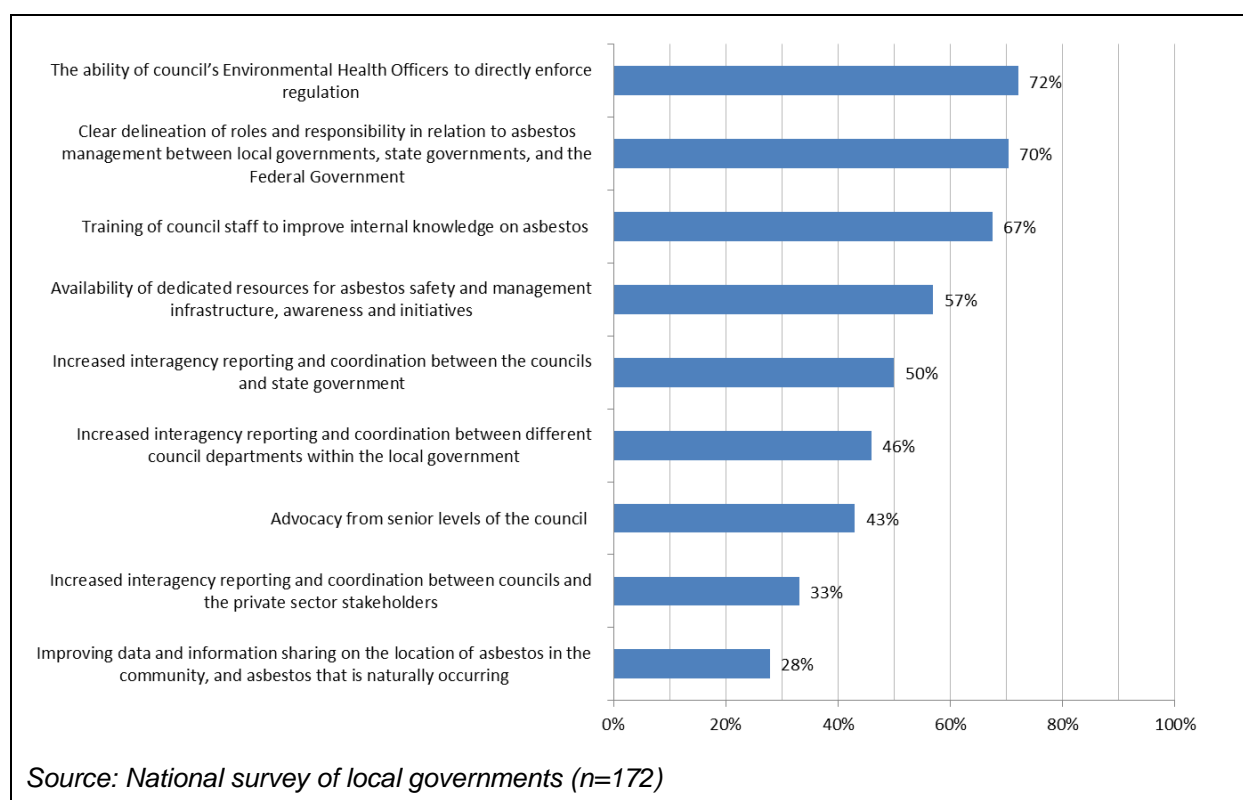
## 5 Enablers and barriers for local governments to manage and improve community asbestos safety

### 5.1 Enablers

#### 5.1.1 Enablers for local governments to improve residential asbestos safety

Figure 9 shows that the most important enablers for local governments are/would be the ability of environmental health officers to directly enforce regulation (72%), clear delineation of roles and responsibilities between different levels of government (70%), the training of staff to improve internal knowledge about asbestos (67%) and the availability of dedicated resources for community asbestos safety and management (57%). There is little variation in the responses by remoteness with the exception of advocacy from senior levels of Council where metropolitan local governments (60%) were more likely to rate this as very important or very important than regional (39%) or rural and remote local governments (30%).

FIGURE 9: PERCENTAGE OF LOCAL GOVERNMENTS RATING CURRENT OR POTENTIAL ENABLERS AS VERY IMPORTANT OR IMPORTANT



There was variation in the responses by state (see Table A10 in Appendix G). The most notable difference is in the responses from South Australian local governments where only 29 per cent rated the ability of their environmental health officers to directly enforce regulation as very important or important. This suggests that local governments in South Australia have less authority than local governments in other states to enforce regulations around asbestos. Local governments in South Australia also rated the importance of dedicated resources around

asbestos safety and management, advocacy from senior levels of council and increased interagency reporting lower than local governments from other states. Overall this suggests that local governments in South Australia do not perceive their role to be important in managing community and residential asbestos safety as compared to local governments in other states.

Local governments in Tasmania and Western Australia also rated the importance of clear delineation of roles and responsibilities between levels of government, and increased interagency reporting and coordination between the councils and state government lower than local governments in other states.

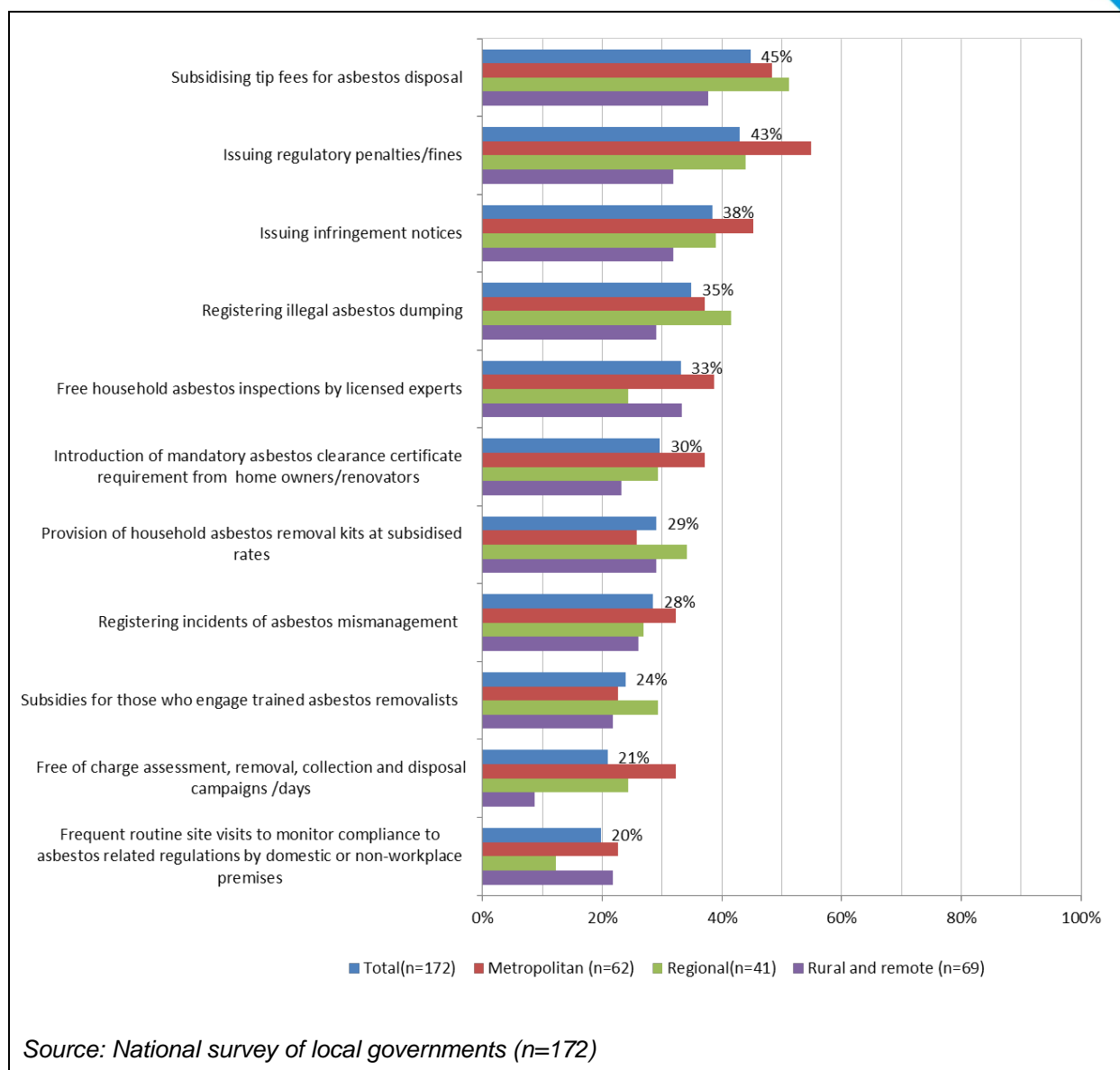
#### 5.1.2 Encouragers of residential asbestos safety amongst DIY renovators and homeowners

Key enablers to reduce the unsafe handling of asbestos, and in particular the illegal disposal of ACMs, have been suggested to be education, improving convenience for proper disposal and creating effective disincentives for illegal disposal (NSW Ombudsman 2010). The national survey of local governments further investigated this by asking respondents to identify actions that would encourage residential asbestos safety by DIY home renovators.

Figure 10 shows no clear consensus amongst respondents with subsidising tip fees for disposing ACMs (45%) and issuing fines for non-compliant behaviour (43%) the most common responses. Local governments don't appear to strongly believe that actions such as providing asbestos removal kits; subsidising the use of trained asbestos removalists; and providing free of charge asbestos assessment, removal, collection and disposal campaigns or days, would encourage asbestos safety by DIY renovators. There was also low support for the introduction of mandatory asbestos clearance certificates from home renovators (30%). This is not surprising given that most home renovations are exempt from development applications under state planning regulations.

Regional local governments were more likely than other local governments to see regulatory action such as issuing fines and infringement notices as likely to be effective. Rural and remote local governments are the least likely to see regulatory actions as effective. Regional local governments were also the most likely to see mandating asbestos clearance certificates and providing free of charge asbestos services as potentially effective.

FIGURE 10: PERCENTAGE OF LOCAL GOVERNMENTS THAT IDENTIFIED ACTIONS THAT WOULD ENCOURAGE IMPROVED ASBESTOS SAFETY BY DIY RENOVATORS AND HOMEOWNERS



Detailed responses by state can be found at Table A11 in Appendix G. In summary:

- > Local governments in NSW and Tasmania were the most likely to rate subsidised tip fees as potential encouragers of asbestos safety amongst DIY renovators. In the case of NSW this could reflect the findings from the Householders' Asbestos Disposal Scheme trial by the NSW Environmental Protection Authority (EPA) with local governments.<sup>4</sup>
- > Local governments in NSW were the most likely to rate free household asbestos inspections as encouragers of asbestos safety amongst DIY renovators and homeowners.

<sup>4</sup> [www.epa.nsw.gov.au/wastegrants/house-asbestos-dispose.htm](http://www.epa.nsw.gov.au/wastegrants/house-asbestos-dispose.htm)

- > Respondents from Western Australia were the most likely to respond that issuing fines and infringement notices are effective. Local governments in South Australia were the least likely to respond that such actions would be effective.
- > Local governments in Queensland were the least likely to see providing subsidised asbestos removal kits, free of charge asbestos services and campaigns or days as effective. Local governments in South Australia appear to also not see the latter as effective.
- > Local governments in Queensland were the most likely to see the introduction of mandatory asbestos clearance certificates from home owners/renovators as effective. It is unclear why this is but the predominant timber style of older housing in Queensland could mean that major home renovations that require development approval from local governments is more common than in other states.

Additional open feedback from respondents was also received for this question. One respondent stated that *“Mandating something will not necessarily encourage someone to adhere, as they are forced to do something. Residents may be concerned that the surveys will impact on their responsibilities and property values.”*

Another respondent stated: *“I would foresee that an asbestos survey would have to be written into legislation...I am not convinced that the Building Commission is interested in doing this though.”*

Two other respondents expressed that carrying out a survey would simply be an inspection, and not a confirmation of asbestos in the property. They also expressed concern that if asbestos is detected on residential properties, local governments currently do not have resources to monitor and manage asbestos on private properties.

Homeowners who participated in the online discussion forums were also asked what their local government could do to make it easier for them to safely handle, remove and dispose asbestos. As most of the participants were unaware of their local government’s asbestos-related initiatives, they made suggestions based on their general knowledge of asbestos management. The following themes emerged:

- > More asbestos awareness campaigns, in particular providing:
  - Easily accessible asbestos related information on their council’s website
  - Asbestos safety awareness material in the form of fact sheets or brochures
  - Awareness campaigns particularly using the television or radio
  - More hands on information sessions about asbestos safely handling asbestos
- > Provide asbestos handling, removal and disposal services including:
  - Free asbestos waste collection days
  - Providing safety and protection equipment either free of charge or at a subsidised price
  - Providing free or subsidised asbestos removal equipment
  - Provide subsidised asbestos removal services
- > Reduce the cost to remove and dispose of asbestos



Interestingly, these suggestions also came from residents of Cumberland City Council in New South Wales that are recognised as leaders in promoting awareness of asbestos safety and already provide an asbestos removal service and asbestos removal kits. This further highlights the need for local governments to be more effective at promoting their actions around asbestos safety in the community.

## 5.2 Barriers to improve residential asbestos safety

### 5.2.1 Findings from the national survey of local governments

In the national survey, local governments were also asked to rate how significant a barrier various factors are to improving community asbestos safety. Figure 11 shows that the most commonly reported large or very large barrier is a lack of funding attached to asbestos related initiatives (65%) followed by insufficient resources to enforce asbestos related regulations (53%). A lack of resources appears to be more of a barrier for regional and rural and remote local governments than metropolitan local governments. This mirrors responses to the question on enablers where the availability of dedicated resources for community asbestos safety and management was commonly stated as an important enabler for local governments to improve asbestos safety.

The lack of a clear strategy on asbestos safety and management is seen as more of a barrier for regional local governments than metropolitan or rural and remote local governments. This could reflect that regional local governments can be quite large requiring coordination between divisions to address issues such as asbestos safety. While this would also be the case in metropolitan local governments, it could be that divisional 'silos' are more entrenched in regional local governments. Most rural and remote local governments are relatively small organisations which could reduce the likelihood of silos forming.

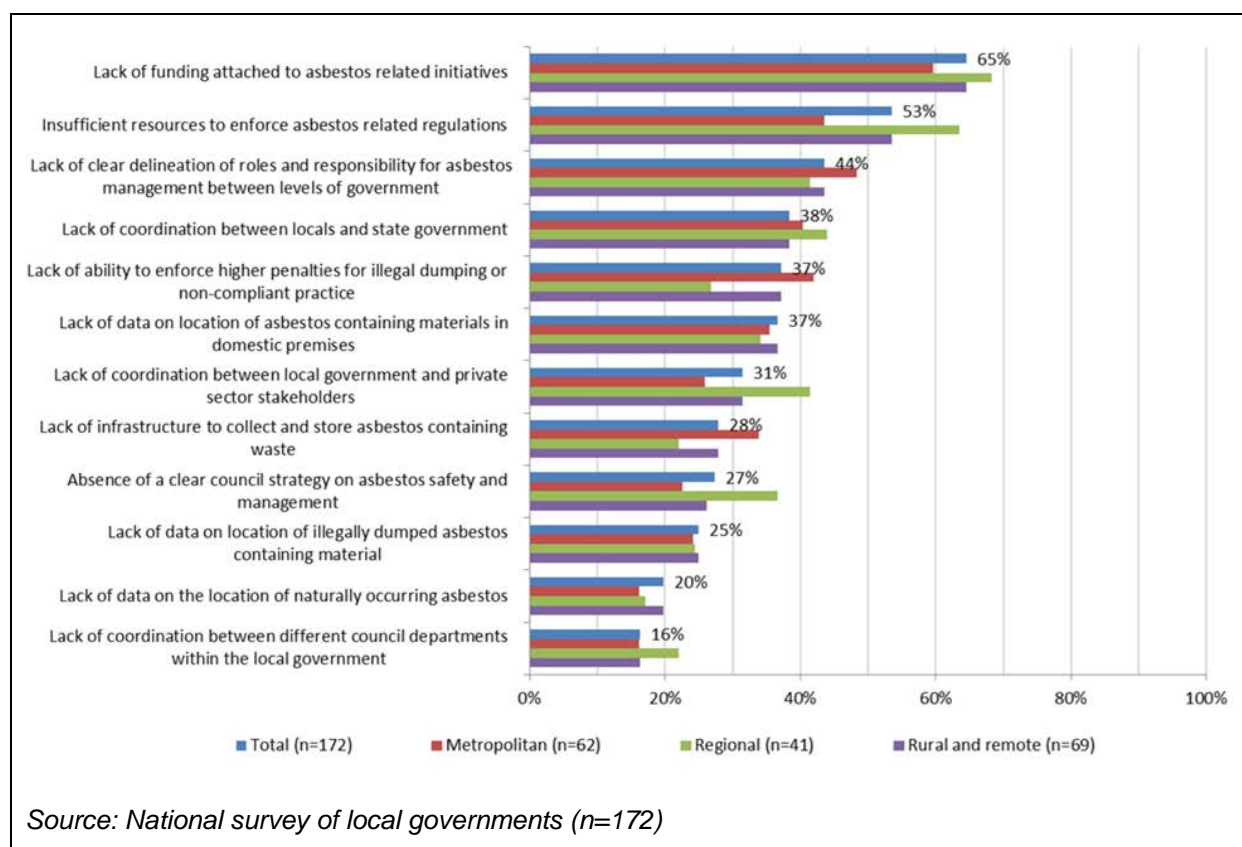
A lack of coordination between levels of government does not appear to be seen as a major issue with only 38% of respondents reporting this as a large or very large barrier.

There was considerable variation in the rating of barriers as large or very large by state (see Table A12 in Appendix G):

- > Local governments in NSW and QLD appear to see a lack of funding attached to asbestos related to initiatives as more of a barrier than local governments in other states.
- > Local governments in Western Australia were by far the least likely to rate insufficient resources to drive asbestos-related regulations as a large or very large barrier.
- > Local governments in Victoria (51%) and Queensland (50%) reported a lack of coordination between local and state governments as more of a barrier than local governments in other states. This suggests less effective effort in this area by the Victorian and Queensland State Governments than other state governments.
- > Local governments in Victoria were the most likely (50%) and local governments in Queensland were the least likely (22%) to see their ability to enforce higher penalties for illegal dumping and non-compliant activities as a major barrier.
- > Local governments in Western Australia (15%) and Queensland (17%) were by far the least likely to report a lack of infrastructure to collect and store ACMs as a major barrier,

while local governments in Victoria (42%) were the most likely. This reflects the distribution of waste facilities that accept ACMs.

FIGURE 11: PERCENTAGE OF LOCAL GOVERNMENTS THAT RATED VARIOUS FACTORS AS LARGE OR VERY LARGE BARRIERS TO IMPROVING COMMUNITY ASBESTOS SAFETY



### 5.2.2 Findings from interviews and focus groups with local governments

During interviews and focus groups with local governments the following challenges for managing community asbestos safety emerged:

- > The lack of visibility of most DIY home renovation
- > A lack of resources to drive education and initiatives in the community, and to monitor compliant behaviour
- > Structural barriers to the safe handling and legal disposal of ACMs including inadequate disincentives for the illegal handling and dumping of ACMs
- > A lack of clarity about the roles and responsibilities of local governments in managing community asbestos

#### *The lack of visibility of most DIY home renovation*

There is a perception that as the development approver and principal certifying authority in most states and territories, local governments have good visibility of development in their LGA. The

assumption is that this strongly positions local government to play a role in educating home renovators about asbestos safety and monitoring residential asbestos controls.

However, local governments are only aware of home renovations where a demolition or building permit is required, or where a complaint is made from another resident. This means that the vast majority of DIY home renovation is invisible to local governments unless a demolition permit is required or structural or load bearing modifications are being made. Nonetheless all local governments consulted believe that there is DIY work being done in their LGAs that is potentially exposing homeowners to asbestos. This includes renovations to bathrooms, kitchens, replacing asbestos fencing and pulling down old garden sheds. Under planning regulations in all states and territories these activities do not necessarily require development approval.

*“If someone makes a complaint about someone pulling down an old fence or shed, then we can go out and investigate. Otherwise we have no idea what people are doing on their properties.”* Local government environmental health officer

Planning approval processes also mean that local governments will not always be the principal certifying authority, often outsourcing this function to private certifiers. Therefore, local governments are not always able to effectively monitor and enforce residential asbestos controls stipulated in development consents.

*A lack of resources to drive education and initiatives in the community, and to monitor compliant behaviour*

The national survey identified resource constraints as the major barrier for local governments to improve community asbestos safety. This was confirmed by local government staff during focus groups where most expressed that education of residents often occurs retrospectively in response to a complaint. Their main proactive form of education is having information about asbestos on their websites and occasional articles in local newspapers and local government newsletters. All local governments consulted increase their focus on asbestos education during asbestos awareness month but most said that they don't have the resources to sustain this focus all year.

*“We have a small team that has to look after asbestos, food safety, noise, water towers and other toxic pollution. Asbestos is important but is only a small part of what we do. We don't have an environmental educator position so just don't have the time to commit to education about asbestos as much as we should.”* Local government environmental health officer

This issue extended to maintaining information about asbestos on local government websites. Most local government staff consulted acknowledged that they rarely look at or update the information about asbestos on their websites. While the information about asbestos is fairly stable, most acknowledged that it is important to ensure that links to external websites are current and not broken.

All local governments consulted also commented that resource constraints extend to their ability to monitor compliant behaviour around asbestos in a timely manner. This includes following up on illegal dumping, prosecuting the perpetrators and following up on complaints from residents about unsafe practices on neighbouring properties or construction sites.

*"If we receive a complaint that someone is pulling down an old shed or fence, it is a few days until we can get a ranger out there to check. By that time the work is finished and the evidence is gone."*

*"We just don't have the resources to follow up and gather all of the evidence we need to prosecute someone for illegal dumping. We never prosecute anyone, we just clean it up and usually not for a few days."*

Local government environmental health officers

#### *Structural barriers to the safe handling and legal disposal of ACMs*

Local government staff consulted identified three main structural barriers to the safe handling and legal disposal of asbestos by their residents:

- > The availability of licenced asbestos removalists, in particular in rural and remote LGAs
- > The cost of hiring a licenced asbestos removalist and disposing ACMs in waste facilities
- > The inconvenience of transporting ACMs to the nearest waste facility that accept ACMs

These have been discussed previously in this report.

In addition to these, local governments in Western Australia were particularly vocal about the inadequacy of penalties for offences relating to asbestos. They all stated that the fines for the illegal handling of asbestos under the *Health (Asbestos) Regulations 1992* are disproportionately small at \$1,000-\$2,000 relative to the penalties for other environmental and public health infringements.

#### *A lack of clarity about the roles and responsibilities of local governments in managing community asbestos*

Whilst some local governments play proactive roles and assume many different responsibilities around the safe handling of ACMs, there is little clear legislative delineation of responsibility around the governance of asbestos management (NSW Ombudsman, 2010).

Staff from local governments in several jurisdictions commented that they are unclear about the full extent of their state government's role in managing community asbestos safety and the expectations on local government.

*"We just need clear guidelines about who does what regarding asbestos. We do things because asbestos needs to be managed but sometimes we don't know if it is our responsibility or the State Government's responsibility."*

*"We need better support from the State Government to educate the community about asbestos safety. I really don't know what the State Government's regional*

*environmental health officer's role is and whether we are responsible for education around asbestos or they are."*

Local government environmental health officers from outside of NSW

An example cited from Mornington Peninsula Shire in Victoria highlights the above issue. The Shire extends along Port Phillip Bay where there are 1000's of historical bathing boxes made from asbestos sheeting. The boxes are colourful and a major tourist attraction on the Port Phillip Bay foreshore. The boxes are privately owned or leased. The issue for Council is that many of the boxes are weathered and present a community health risk, but Council is not the only authority with responsibility for the foreshore. In response to the risk Council has committed a portion of rates revenue to survey the condition of all of the boxes to determine an appropriate course of action. However, although the Council has committed to the audit they are unclear about the extent of their responsibility for the maintenance or removal of any boxes determined to be a health risk.

Another example was provided by Parramatta City Council that has 27 James Hardie legacy sites in their LGA. It is a significant resource burden for the Council to assess the risk of these sites to residential areas. The staff consulted believe that this should be a NSW EPA responsibility under the *NSW Contaminated Land Management Act 1997*. However, to shift responsibility this would require the sites to be classified as significantly contaminated which the NSW EPA has apparently been reluctant to do. Currently the Council receives no financial support to manage these sites and are obligated to do so under state environmental planning legislation.<sup>5</sup>

Local government staff also highlighted the challenge of state and territory occupational health and safety regulations that position state and territory workplace health and safety authorities as the regulators around the safe handling of asbestos on commercial building sites. The regulation of waste management by local governments is also complicated by state and territory government levies on waste disposal, including ACMs, and EPA-imposed conditions on waste facility licencing to accept ACMs.

### 5.3 Asbestos policies

The national survey and focus groups with local government staff indicated that clear delineation between the roles and responsibilities of local and state government is important for local governments to manage community asbestos safety. This was the impetus for the introduction of the *Model Asbestos Policy* for local governments in NSW (NSW Division of Local Government 2012) which has since been adopted by around half of NSW local governments (NSW Ombudsman 2017). NSW is still the only jurisdiction to have implemented such a policy.<sup>6</sup>

Although the sample was small and not representative, the local governments from NSW were less likely than other local governments to report in focus groups that they are unclear of their

<sup>5</sup> State Environmental Planning Policy No. 55 – Remediation of Land  
<[www.legislation.nsw.gov.au/#/view/EPI/1998/520](http://www.legislation.nsw.gov.au/#/view/EPI/1998/520)>

<sup>6</sup> The *Model Asbestos Policy* was updated in 2015 – see: NSW Office of Local Government. 2015, Model Asbestos Policy for NSW Councils, <[www.lgnsw.org.au/policy/asbestos-model-policy](http://www.lgnsw.org.au/policy/asbestos-model-policy)>



roles and responsibilities for managing community asbestos safety. These local governments from NSW stated that this is in part because of the *Model Asbestos Policy* and their use of it as a template for their own asbestos policies. Some of these NSW local governments have also used their asbestos policy as the basis for internal guidelines and procedures for managing asbestos in their own assets and in the community.

*“Our asbestos policy is based on the Model Policy. It is really good because it makes it clear how we need to respond in different situations.”* Environmental health officer from a NSW local government

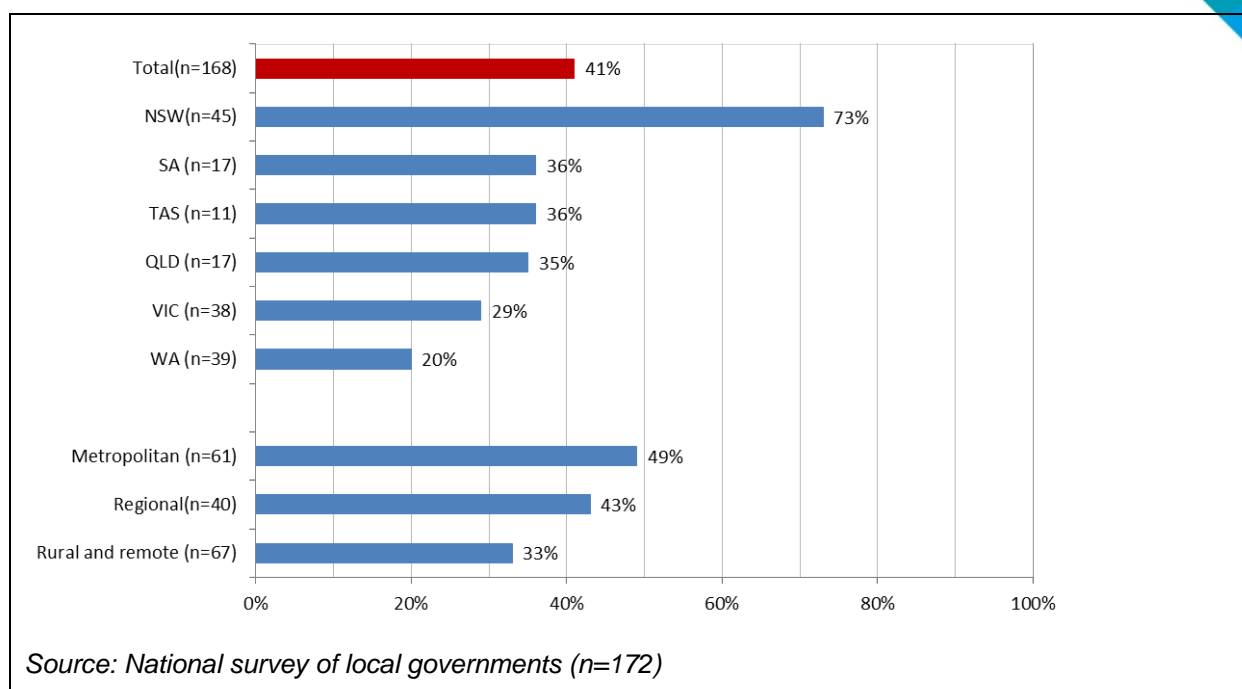
The review of local government websites identified 117 local governments with asbestos policies or asbestos management plans on their websites. The majority of these are in NSW (56) and Western Australia (31). This represents 44 per cent and 24 per cent of local governments in NSW and Western Australia respectively. It is important to note that these documents are generally internal council documents and might not always be publically available on local government websites. However, at least in NSW this figure is similar to that recently reported by the NSW Ombudsman (NSW Ombudsman 2017).

Although the survey of local governments is not representative of all local governments across Australia, it suggests that 41 per cent of local governments across Australia have an asbestos policy (Figure 12). Metropolitan local governments are the most likely to have an asbestos policy (49%), while rural and remote local governments are the least likely (33%).

Local governments in NSW were the most likely to report having an asbestos policy (73%) while local governments in Western Australia were the least likely (20%). This percentage for NSW is higher than reported by the NSW Ombudsman (2017) which could reflect bias in the survey sample. The percentage for Western Australia local governments is consistent with the review of local government websites. The responses from local governments in other states is also higher than expected but could reflect that asbestos policies outside of NSW and Western Australia are rarely publically available on local government websites. Alternatively, respondents could have confused an asbestos policy with an asbestos management plan for managing asbestos in internal assets.



FIGURE 12: PERCENTAGE OF LOCAL GOVERNMENTS WITH ASBESTOS POLICIES



Survey respondents who indicated that their local government has an asbestos policy (or are in the process of developing one n=11) were also asked to indicate the priority areas of their asbestos policy. Of the 80 respondents, the priority areas reported are:

- > Managing asbestos risks within the local government workplace and amongst their workers (89%)
- > Outlining their local government's roles and responsibilities for managing asbestos (76%)
- > Responding to emergencies and incidents of asbestos removal and disposal (75%)
- > Managing asbestos waste landfills and facilities (48%)
- > Outlining their local government's processes for assessing development applications (43%)
- > Identifying locations with naturally occurring / weathering asbestos and/or asbestos contamination (26%)

The comments from local government staff and the survey responses indicate that a state-wide model asbestos policy helps clarify the role of local governments in managing asbestos in their communities and sets the parameters for the relationship between state and local governments. This suggests merit in states and territories outside of NSW developing similar model policies.

## 6 Ideas to better support local governments improve community asbestos safety

The national survey and focus groups identified several challenges for local governments to improve community asbestos safety. These have been described in the previous section of this report. As part of focus groups, local governments staff were also asked what would help them better manage asbestos safety in their community. Their responses are summarised below.

### 6.1 Additional resources

Additional resources appear to be the most common additional support local governments believe they need to improve asbestos safety in their communities. This is not surprising given that a lack of resources to drive community education, enforce regulatory compliance and implement asbestos safety initiatives were identified as significant barriers in the national survey.

In the focus groups all local government staff said that additional resources for community education would be helpful. Most of the local governments consulted do not have funding for an environmental or public health educator meaning that environmental health or public health officers have responsibility for community education. These officers have responsibility for a number of potential public health concerns leaving little time to actively promote asbestos safety in the community. They are also not experts in public education.

*“We have a small team with responsibility for asbestos, food safety, chemical waste, water safety and noise pollution. Asbestos is a small part of what we look after and we just don’t have the resources to do much around education in the community. We only have the resources to focus on regulatory activities.”*

*“Our community is very multi-cultural. The language and tone of our educational materials really needs to be tailored for each group. We also need to promote our messages in language-specific media. This is hard for us with current resources.”*

*“The (state government) could be stronger with their campaigns around asbestos safety. We don’t have the budgets to promote these messages using mainstream media. The (state government) could do more to get these messages out.”*

Local government environmental health officers

Most commented that a suite of resources for them to use as a basis for education campaigns would also be useful. This includes content for websites, flyers for distribution and content for local newspapers and newsletters.

Several local governments also commented that they would like additional resources to fund initiatives that remove structural barriers to asbestos safety.

*"I would like to have the resources to provide asbestos removal kits. But at around \$100 each I just don't have the budget to provide them. All I can do is let people know what they need and send them off to Bunnings which is inconvenient for them."*

*"It is too far for people to travel to dispose asbestos. I would love to have funding to make disposal easier such as setting up an asbestos drop off point for residents and tradies with Council then transferring to a landfill."*

Local government environmental health officers

Some local governments have secured additional resources to kick start asbestos safety initiatives through various state government grants. This suggests that additional State and Territory or Commonwealth government grant funding would help local governments deliver asbestos safety initiatives. However, the pool of grant funding will always be limited and is not a sustainable solution.

## 6.2 Data and processes to build a business case for additional expenditure on community asbestos safety

Under the financial constraints facing many local governments, in particular those in states with rate capping or pegging, it will be a challenge for many local governments to allocate additional funding for community asbestos safety from their core budgets. Therefore, it is important that a business case is made for allocating additional funding.

Increased data on the location of asbestos in the community was only seen as an important enabler by 28 per cent of local governments that responded to the national survey. However, mounting a business case for increased expenditure requires data to demonstrate the financial and/or social benefits of investing in asbestos safety. Based on the findings of this research, local governments would benefit from support establishing systems and processes to capture the volume and costs of illegally dumped asbestos. This support could be from other levels of government or state and territory based local government associations depending on their capacity. Either way, a nationally consistent approach would be ideal to create nationally comparable data for monitoring and evaluation and benchmarking purposes.

## 6.3 The removal of state government waste levies

All local governments consulted in the focus groups would also like state government waste levies to be removed for asbestos. They understand the purpose of the levies to reduce waste and encourage recycling. However, they believe that this is not applicable to asbestos as it cannot be recycled and discourages householders and tradespeople from legally disposing ACMs.

*"In our Shire, the cost of using the tip is a big disincentive. We find that some people drive past the tip and illegally dump their asbestos loads. I think it should be free to dump small quantities of asbestos at the tip but someone has to pay for that to"*

*happen. This council could not afford to cover the cost.*" Local government environmental health officer.

However, Table 2 shows that the landfill levy rates are only high in NSW. The levies are intentionally low in other jurisdictions to encourage the safe disposal of asbestos. State government levies are only high in NSW and to some extent Western Australia. This suggests that in most jurisdictions the high cost of disposing asbestos at waste facilities is due to gate fees which are primarily determined by the owner of the waste facility, including local governments. There could be reasons for operators charging high gate fees including licencing, infrastructure and insurance costs. However, these figures suggest that the perception that state and territory government levies are responsible for the high cost of disposing asbestos is somewhat misunderstood.

TABLE 2: STATE GOVERNMENT WASTE LEVIES FOR ASBESTOS DISPOSAL

State/territory	Metropolitan area levy (\$/tonne)	Regional area levy (\$/tonne)
ACT	\$0	\$0
NSW	\$135.70	\$78.20
NT	\$0	\$0
QLD	\$0	\$0
SA	\$31	\$15.50
TAS	\$2	\$5
VIC	\$30	\$30
WA	\$60	\$0

Source: ASEA, Blue Environment & Randell Environmental Consulting (2017)

Note: 2016/17 levies

## 6.4 A smart phone application allowing residents to inform local government of instances of illegal dumping

Another idea that was welcomed by local government staff consulted is a smart phone application allowing residents to inform local governments of instances of illegal dumping. Environmental health officers commented that they are not always notified about illegally dumped asbestos until sometime after the event. Some also commented that the extent of the issue is not always reported accurately and they have limited capacity to always investigate immediately.

In NSW such a smart phone application has already been developed by the NSW EPA. This allows residents to report incidents of illegal dumping, the types of suspected waste, report the

GPS location and upload photos. This allows Regional Illegal Dumping squads to investigate illegal dumping incidents.

The local governments in NSW that participated in focus groups believe that this is a good initiative. The local governments consulted from other states and territories said that such an initiative does not exist in their jurisdiction but they all agreed that this has the potential to speed up notification times, improve their ability to prioritise the investigation of incidents of illegal dumping and improve the ability to gather evidence for prosecution.

## 6.5 The introduction of education initiatives for residents submitting a development application

Local government staff were asked in focus groups to consider the following options for improving residential asbestos safety:

- > The introduction of a short online asbestos safety video for residents submitting a development application
- > Insertion of an 'acknowledgement tick box' on a development application form that states the applicant is aware of asbestos risks and a variety of other possible solutions
- > An online detailed check list stage in the development application process, which comprises some typical asbestos removal awareness matters which would provide a check on what residents say they know and don't know
- > Inclusion of asbestos information in the form of leaflets or booklets which could be included with development applications

All felt that these initiatives would be useful in principle but will have very little reach with DIY home renovators. As mentioned previously, the majority of DIY home renovation does not require development consent so is invisible to local governments. It is common for development applications to be submitted by contractors, so the main DIY home renovators that would be reached by these initiatives are owner builders who are a small proportion of home renovators.

## 7 Case studies

Despite resource limitations of local governments to influence asbestos safety, some local governments are already playing a leading role in their communities. The interviews and focus groups identified examples where local governments are delivering proactive asbestos safety initiatives including education and other practical support. These are described below. However, while these provide interesting examples, the delivering local governments were open about the fact that they are unsure about the effectiveness of the initiatives as they undertake no monitoring or evaluation activities.

### 7.1 Cumberland Council, NSW

Cumberland Council in Western Sydney (formed from the amalgamation of Auburn City, Holroyd City and part of Parramatta City councils) is recognised as one of the leading local governments in Australia for its Asbestos Awareness and Education Program.

The LGA is part of what is known as the 'fibro belt' containing a large number of houses constructed from fibro sheeting and is an area of high DIY renovation activity. The LGA is highly diverse and has numerous different CALD groups amongst which the level of understanding about asbestos is unclear. This diversity makes it difficult to reach all segments of the community with public education campaigns.

Illegal dumping is a significant challenge with the nearest waste facility that accepts ACMs approximately 45 minutes away with a minimum charge of \$188.50. This is considered a barrier for many of the LGA's residents.

In 2014 and 2015 the former Holroyd and Parramatta Councils participated in the Western Sydney Residential Asbestos Disposal Scheme (WSRADS) which included a series of programs run as a partnership between Local Government NSW and the NSW EPA. The programs included:

- > Free removal of small amounts of non-friable asbestos (for example small amounts of asbestos sheeting) from residential homes by licensed asbestos removal contractors
- > A council-issued rebate for residents correctly disposing of asbestos to a landfill

Both programs worked towards the key objective of reducing the illegal and unsafe disposal of asbestos in Western Sydney by educating residents and making correct disposal easier and more affordable. Participating local governments ran advertisements, sponsored editorial, news stories and letter box drops to promote the WSRADS programs as well as including information on council websites.

Holroyd, and now Cumberland, Council capitalised on this opportunity and has sustained its campaigning about asbestos safety in the community. The council continues to offer free collection of less than 10m<sup>2</sup> of non-friable household asbestos and runs free asbestos awareness workshops for residents at least monthly. The workshops run for two hours and attendees receive a free asbestos removal kit valued at \$100.

The Council is also trialling a free asbestos inspection program funded by NSW EPA grant. The inspection involves an occupational hygienist conducting a 45 min visual inspection of residential properties.

In 2016:



- > 57 residents used the free domestic asbestos collection service
- > 28 residents attended workshops about asbestos in the home
- > 7 homeowners accessed the free asbestos inspection service

In addition to the above, the Council developed a separate asbestos awareness website ([www.asbestosanswers.com.au](http://www.asbestosanswers.com.au)) which contains information for homeowners about:

- > The health risks of asbestos and when to worry
- > How to handle asbestos safely
- > How to legally dispose of ACMs
- > Managing asbestos *in situ*
- > Where to find a licenced asbestos removalist, occupational hygienist and a lab to test samples for asbestos
- > When local government approval is required for home renovation activity
- > Illegal dumping including where to report it and the fines
- > When and how to report neighbourhood activity around asbestos that is causing concern

The website also contains an interactive Q&A game to test people's knowledge around asbestos safety. The council consciously did not include any local government branding on the website to make it useful and feel relevant for residents outside their LGA.

## 7.2 Ballina Shire Council, NSW

Ballina Shire is a regional LGA located on the North Coast of NSW. The Council recently adopted an asbestos policy based on the NSW Model Asbestos Policy to ensure consistency of awareness and asbestos management processes across all of Council. The LGA has a large amount of housing stock containing asbestos and staff consulted believes there is a large amount of DIY home renovation activity that is not picked up in the development application process.

The Council participated in the Household Asbestos Disposal Scheme (HADS)<sup>7</sup> trialled by the NSW EPA and in 2016-17 was awarded two grants totalling \$125,000 under the EPA's Better Waste and Recycling Fund.<sup>8</sup> The grant funding was to combat the disposal of ACMs in kerbside bins and to install infrastructure to deter illegal dumping at known hotspots. The Council is using the funds to increase community awareness of asbestos and proper disposal methods by targeting DIY home renovators with educational material such as flyers and a media campaign. Environmental Health staff are also developing a factsheet to distribute on the website, in rates notices and as part of development applications.

The Council also purchased a hand held asbestos detector gun for use at illegal dumping sites to ensure that its workers are aware of the risks and exercise appropriate handling practices if asbestos is detected.

<sup>7</sup> <http://www.epa.nsw.gov.au/wastegrants/house-asbestos-dispose.htm>

<sup>8</sup> <http://www.epa.nsw.gov.au/wastegrants/better-waste-recycle.htm>

The Council also sells subsidised asbestos removal kits for \$30 at the customer service centre in Ballina, which includes a voucher for free disposal at the nearest waste facility that currently accepts ACMs (Lismore).

### 7.3 Wollongong City Council, NSW

Using grant funding awarded under the NSW EPA's Better Waste and Recycling Fund, Wollongong City Council has implemented an asbestos awareness campaign for the last two years to minimise the impact of illegal dumping. The Council coordinated the latest three-month campaign to coincide with the 2016 Asbestos Awareness Month. The campaign included:

- > Displaying two prominent outdoor banners
- > Advertising on local radio (116 plays of a community service announcement), online and in the local newspaper
- > Distributing 3000 Asbestos Awareness cobranded Wollongong City Council flyers to all hardware stores, libraries, and community centres in their LGA
- > Promotional displays in the main customer service centres and shopping centre
- > Media stories/interviews on local radio and in newspapers
- > Asbestos safety messaging in Council newsletters
- > Social media messaging
- > Sponsoring two Blue Lamington Drives to raise funding for asbestos research: One for the general public at the local Bunnings and one for Council staff to emphasise the importance of asbestos awareness in the workplace and the home

This campaign saw Wollongong City Council awarded a Betty Award in 2016 for the Most Improved Council Asbestos Awareness Month Campaigner (National).

The Council also promotes any WorkCover events being held in the area to DIY home renovators. The "Are you Playing Renovation Roulette" leaflet is also provided with any development application approval notice that involves home modifications or demolition.

The Council conducts asbestos awareness training for all staff and contractors, and makes asbestos disposal kits available for staff at all Council depots.

The effectiveness of Wollongong City Council's asbestos awareness campaign has not been formally evaluated. However, it was noticeable in the online discussion forums with home owners (see section 4) that Wollongong City residents were more aware of their local government's asbestos campaign than residents of other LGAs.

### 7.4 City of South Perth, Western Australia

The City of South Perth is an inner city LGA in metropolitan Perth. The LGA does not have a waste facility that accepts ACMs, with residents needing to travel a minimum of 45 minutes to the nearest licenced facility.

For over 10 years the Council has held a free asbestos drop off day at its waste transfer station. On the last Saturday in September, Council sets up a bulk waste bin for City of South Perth residents to dispose of up to 10m<sup>2</sup> of ACMs. The day is promoted throughout the year and on the annual waste calendar, and is attended by Environmental Health staff to check that loads

are properly wrapped and do not exceed the accepted quantities. At the last drop off day, 7.4 tonnes of ACMs were collected from approximately 100 residents. The cost of holding the day including advertising, staff overtime and hiring a contractor to transport and dispose the ACMs is estimated at approximately \$3,000.

The initiative was initially established to counteract the dumping of ACMs of suburban streets and laneways. At first the day was held twice a year but due to decreasing demand is now only held once. Council's Environmental Health Coordinator commented that the overall volume of ACMs collected once per year roughly equates to what used to be collected across both days, suggesting that residents are planning asbestos removal activities to coincide with the drop-off day. While the Council has not formally evaluated the initiative there has anecdotally been a decline in illegal dumping in the LGA suggesting that the initiative has been effective.

## 7.5 Latrobe Council, Tasmania

Latrobe Council is a small rural and remote local government in Northern Tasmania near Devonport. In 2016 the council won a Betty Award for their wide participation during Asbestos Awareness Month. The Manager of Environmental Health developed a dolls house that outlined all of the locations asbestos can be found in homes. The house was used as a basis for advertising about asbestos safety in local media and was displayed in the customer service centre for several months. The Council held a Blue Lamington Morning Tea as an information session for staff and to raise funds for ADRI.

The Council is currently developing asbestos testing kits and plans to make 30 available to residents for free. The kits will include a discount voucher to have the sample testing at a laboratory.

## 7.6 Other local governments identified that are delivering community asbestos safety initiatives

The review of local government websites identified other local governments that are delivering initiatives which boost their community's capacity to safely handle asbestos. These local governments were not engaged in the focus groups as part of this research so only brief details about their initiatives were identified.

### 7.6.1 Tweed Shire Council, NSW

Tweed Shire Council in Northern NSW has reduced its asbestos disposal fees by more than half (from \$183.50 per tonne to \$ 85 per tonne). In its public awareness campaigns, the Council has highlighted how reducing disposal costs has had a direct impact on the amount of asbestos illegally dumped. The Council also occasionally offers its residents a chance to win \$150 hardware vouchers by providing their feedback on the region's asbestos awareness campaign.

### 7.6.2 Moreton Bay Council, Queensland

This Council in the Northern suburbs of Brisbane allows residents to dispose asbestos waste of up to 500kgs for free per visit in its waste facility. In total residents can dispose up to two tonnes of asbestos waste per year for free.

### 7.6.3 Clarence Valley Council, NSW

Clarence Valley Council in Northern NSW participated in NSW EPA Household Asbestos Testing Scheme also partnered with North-East Waste to provide free loose-fill asbestos testing

for householders. If asbestos is detected during testing, the Council provides residents subsidised asbestos removal kits for \$15 each.

#### 7.6.4 Latrobe City Council, Victoria

Latrobe City Council was the first in Australia to introduce the 'Asbestos in home Removal Kit' for its community. The Council provides the kit for a subsidised price of \$50 with a free asbestos awareness and information session included.

#### 7.6.5 Other local governments delivering asbestos safety initiatives

Several local governments were identified that provide asbestos removal kits and in some cases at subsidised prices. These are:

- > **Byron Shire Council (NSW)** – subsidised for residents at \$25.
- > **Richmond Valley Council (NSW)** – at cost for \$110 but include a discount voucher for the disposal of domestic asbestos at its Nammoona Waste Transfer Station.
- > **West Wimmera Council (WA)** – free for residents.
- > **Benalla Rural City Council (VIC)** – free for residents.

Several local governments were also identified that provide asbestos removal or disposal services for residents. These are:

- > **City of Parramatta (NSW)** - offers a free removal service once per year for household asbestos of up to 10m<sup>2</sup>. The Council was unable to provide details about the cost of the service or the quantity of asbestos removed.
- > **Townsville Council (QLD)** - provides specialised waste disposal services including asbestos removal and disposal for its residents.
- > **Belmont Council (WA)** – organises a free asbestos disposal day each year.

**North Sydney Council (NSW) and Mossman Council (NSW)** were also identified as regularly conducting free asbestos awareness sessions for their residents.

## 8 Features of an evidence based response to improve community asbestos safety

The previous sections highlight opportunities for local governments to influence the behaviour of DIY renovators and tradespeople and improve asbestos safety. Changing community behaviour towards desirable outcomes is multifaceted and can be a key challenge. The UK Government's report on behaviour change models identified over 60 different models and theories for understanding behavioural change (Darnton 2008) highlighting this complexity.

Evidence suggests that current campaigns around asbestos safety and statutory controls have had limited success and can be expensive to enforce. This presents an opportunity to develop and trial non-statutory models of behaviour change around asbestos safety.

Internationally and in Australia models of behaviour change have primarily been used by higher levels of government and not local governments. However, the proximity and frequent contact of local governments with their residents, position local governments to trial non-statutory behaviour change initiatives.

Although there are no examples where non-statutory behaviour change models have been used to increase the safe handling and disposal of asbestos, there are models which could be applied in this context. Broadly, there are three key objectives for local governments in relation to improving asbestos safety that models of behaviour change could be applied to:

- > Increasing awareness and education of asbestos and the dangers of exposure
- > Improving homeowners management and removal of asbestos
- > Improving lawful disposal of ACMs.

Models that local governments could employ to influence behaviour change in these areas include:

- > Nudge Theory
- > Health Belief Model
- > Social Practice Theory
- > DEFRA's 4Es model

These models and how local governments might apply these to improve asbestos safety are described below.

### 8.1 Social Practice Theory

Social Practice Theory is a theory of how social beings, with their diverse motives and their diverse intentions, make and transform the world which they live in. It states that human behaviour is a combination of multiple elements including physical and mental activities, meanings, norms, technology use and knowledge which interconnect and develop into actions or behaviour in everyday life (Reckwitz 2002).

The key implication of this theory is the concept of interconnectedness of action. Since multiple elements exist when activating behaviour, using social practice theory to change asbestos

behaviour requires a multi-faceted approach in which key influences on behaviour are addressed such as:

- > Awareness and knowledge of the risks of asbestos and the safe handling and disposal of ACMs
- > Structural factors such as the cost of safely removing and disposing of ACMs
- > Social and cultural norms i.e. the attitudes and behaviours of the community as a whole around asbestos management
- > Habit i.e. changing repeated behaviours to entrench the safe handling and disposal of asbestos.

Social practice theory presents a framework for local government efforts to initiate and sustain behaviour change in their community. For asbestos safety this means local governments implementing a multi-faceted approach including:

- > Campaigns and messaging about the risks of asbestos, how to safely handle and dispose of ACMs, and the risks and costs of illegal dumping
- > Implementing affordable and convenient options for people to safely remove and dispose of ACMs
- > Sustaining these initiatives to ensure that messages are reinforced and behaviour become embedded.

The literature identifies local governments that are taking some of these approaches but only a few that are implementing a holistic approach that addresses attitudes, knowledge and affordable and convenient handling and disposal options. Cumberland Council described earlier in this report is one local government addressing the majority of these areas, which has resulted in them being seen as a leader in improving and facilitating the safe handling of asbestos in the community. However, despite delivering sustained campaigning and offering a subsidised asbestos removal service for residents, the Council does not provide asbestos removal kits all year round. The kits are only supplied during asbestos information sessions during the annual Asbestos Awareness Month leaving a gap for the rest of the year. This highlights that there are opportunities for local governments, even those that are leading the sector, to strengthen their response to asbestos safety to address all of the elements that social practice theory states will lead to behavioural change.

## 8.2 DEFRA's 4 Es Model

The UK Department for Environment Food and Rural Affairs (DEFRA's) 4 Es model aims to understand and influence behaviour by exploiting individuals' motivations and barriers to action. The 4 Es are (Jackson 2005):

- > Enable – making it easier. Provide people with the support they need to make responsible choices.
- > Encourage – give the right signals. Understand and offer the benefits to change.
- > Engage – get people involved. Involve people early on so that they understand what they need to do and help them develop a sense of personal responsibility.



- > Exemplify – authorities need to lead by example.

When applied to local government's role in asbestos safety, the 4 Es would involve making it easy and affordable for people to safely handle and dispose ACMS, communicating the benefits of safe handling and disposal, and local governments leading by example by adopting and promoting their own policies and action around asbestos management.

These elements align with the framework offered by social practice theory, although extend the role of local governments to leading by example with actions such as adopting their own asbestos policies.

Fewer local governments in states and territories other than NSW, have adopted asbestos policies, although examples such as Latrobe City Council do demonstrate that local governments can lead by example without a specific policy. Nonetheless, having an asbestos policy guided by a state-wide framework would help local governments lead by example by clarifying their roles and responsibilities and promoting a consistent jurisdictional, or national, approach.

### 8.3 Nudge Theory

Nudge Theory stems from social practice theory and behavioural economics (sometimes referred to as behavioural insights), and seeks to voluntarily influence people towards better decisions by presenting choices in different ways (Thaler and Sunstein 2008). Nudging aims to achieve environmental and other policy outcomes with minimal cost through positive feedback to encourage the desired behaviour. The idea that encouragement rather than punitive measures is more effective at changing behaviour is supported by studies into tax compliance where increasing fines has actually been found to decrease tax compliance (Murphy 2008). Although not studied, a similar outcome could theoretically result from increasing fines for illegally dumping ACMs. To date there are no published studies into the impact of various levels of punishment for illegal dumping and enforcing fines has resource implications for local governments in itself.

Nudge Theory is a new concept for local government but has been used extensively overseas, in particular the UK, and by state governments in Australia. One of the key areas of interest has been the use of behavioural insights to redesign letters and communications between citizens and governments (e.g. reminders to pay taxes or text messages to remind people to settle court fines). Randomised-controlled trials to evaluate the effectiveness of several of these 'nudges' have shown that they have delivered strong results (UK Cabinet Office 2012).

In a review of 47 behavioural insights trials around tax compliance and energy consumption the following approaches were found to be effective:

- > Changing and influencing perceived norms for enhancing compliance and cooperation in individuals, especially when targeted within social groups
- > Appealing to people about fairness and the impact of non-compliance on fairness
- > Initiating comparison within social groups such as providing residents with a comparison of their home energy use to their neighbours
- > Random audits of compliance, provided they are sufficiently likely
- > Discount or reward schemes (John & Robb 2017).

A recent study by the NSW Government's Behavioural Insights Unit further supports the effectiveness of appealing to fairness as a method of behavioural change. St Vincent's Hospital trialled a range of appointment reminder text messages that varied to the existing message that provided only the appointment details. Messages that included information about the financial loss to the hospital and impact on other patients of non-attendance led to an 18 per cent reduction in non-attendance at outpatient appointments saving \$66,000 per year (NSW Department of Premier and Cabinet 2016).

While local governments have yet to embrace Nudge Theory and 'nudges' have not been applied to asbestos safety, the findings summarised above highlight opportunities for local government. One of the basic premises of Nudge Theory is that messages are personalised rather than broad community level campaigns. Local governments are in close contact with their residents through council rate notices, water levy notices in some states, building applications and various distribution lists. This places local governments in a strong position to use nudges to change resident behaviour around the safe handling and compliant disposal of ACMs.

There could be an opportunity for local governments to accompany personalised information to potential DIY renovators about safely handling and disposing asbestos with messages:

- > Promoting the benefits of residential asbestos surveys;
- > Highlighting the risks of exposure to other if asbestos is unsafely removed or improperly disposed of;
- > Highlighting the financial costs of illegal dumping and the impact on the ability of local governments to deliver other services.

If local governments monitor the volume and costs of illegal dumping annually, behavioural insights trials suggest that communicating this in terms of additional services able to be provided with the savings could also be effective (John & Robb 2017).

## 8.4 Health Belief Model

The Health Belief Model describes how a 'perceived threat' is at the core of behavioural change and a person's readiness to take action (Rosenstock 1966; Becker 1974; Sharma & Romas 2012). The perceived susceptibility or vulnerability to a threat and the seriousness of expected consequences are the core of this model.

Applying this model to asbestos management could be highly relevant although whilst the understanding of the seriousness and consequences of exposure to asbestos are high, the perceived susceptibility is mixed. Research suggests there is disconnect between awareness of the dangers of asbestos and attitudes with 1 in 3 Australians not believing that asbestos is a major concern for them (ASEA & Ernest & Young 2016).

The Health Belief Model outlines two cues which can trigger action:

- > An internal cue i.e. symptoms of poor health
- > An external cue i.e. media campaigns and receiving information.

An external cue may be the most relevant in the context of asbestos and could involve changing the way DIY home renovators and tradespeople perceive the danger and risks of exposure through education, media campaigns and raising awareness.

Many local governments already deliver campaigns or make available information about the danger and risks of exposure to asbestos. Based on the Health Beliefs Model and the low internalisation of risk amongst DIY renovators effective campaigns and messaging by local government should highlight the risks of exposure and incidences of mesothelioma amongst this cohort specifically.

The perceived capacity of individuals to adopt the behaviour is also a key component to the Health Beliefs Model (Sharma & Romas 2012). As also supported by Social Practice Theory and DEFRA's 4Es Model, this means ensuring that desired actions to change the asbestos related behaviour are affordable and convenient.

There are limitations on the ability of local governments to provide convenient and affordable waste facilities that accept ACMs and most local governments provide information about waste facilities and disposing ACMs on their websites. However, the example of the subsidised asbestos removal service by Cumberland Council in NSW is an example of something local governments can do to make the removal of residential ACMs affordable and convenient.

The subsidised asbestos removal kits made available by several local government is another example where the safe removal of small quantities of residential asbestos can be made affordable. The kits are available for \$40 and include the disposal fee at the City landfill. The possible issue with this initiative is that they are available at the main council customer service centre which is not open on weekends when the majority of DIY renovation occurs. Exploring home delivery options could make this intervention both affordable and convenient.

## 9 Conclusions

### 9.1 Awareness in the community about asbestos safety

Previous research and the findings of this research confirm that DIY renovators are a major risk group for exposure to asbestos and the 'next wave' of asbestos-related disease in Australia. Almost three-quarters of Australia's housing stock is thought to contain asbestos and more than half of Australian adults have or are intending to undertake home renovations. Many of these will undertake these renovations themselves.

The previous research commissioned by ASEA and the online discussion forums with homeowners indicate low awareness amongst DIY renovators about the risks, where and how to identify asbestos in the home, and how to safely handle and dispose asbestos. The online discussion confirmed that many homeowners do not actually know if their homes contain asbestos, escalating the risk of exposure. Alarming, those most likely to undertake DIY home renovations (under 40 year olds) have been identified as those with the least awareness.

The fragmented nature of information about asbestos has been previously cited as a contributor to this low awareness amongst homeowners (NSW Ombudsman 2010). The research conducted for this project did not explicitly confirm this but did identify challenges with the current way that local governments present information about asbestos. The review of websites confirmed that information about asbestos on local government websites is incomplete, spread across multiple webpages that are not always linked and is difficult to locate. It was clear during focus groups with local governments that organising and maintaining this information is also fragmented across local government departments with generally no single source of responsibility. Most homeowners that participated in the online discussion forums had not looked on their local government's website for information about asbestos and had very little awareness about the actions their local governments are taking to improve community asbestos safety.

### 9.2 The opportunity and capacity for local governments to improve community asbestos safety

Local governments are the level of government closest to the community, including DIY home renovators, and in theory are well placed to be able to understand the extent of asbestos in their LGAs. Local governments are theoretically the first place people go for information, although the online discussion groups suggested that this might not be the case around asbestos as other research has suggested.

The surveys and online discussion forums provided empirical evidence that there is a clear opportunity for local government to play a role in improving community asbestos safety. After building certifiers and builders/tradespeople, local governments are the most trusted sources of information for:

- > The health risks of exposure to asbestos
- > How to identify asbestos
- > How to safely handle ACMs

Not surprisingly, local governments are the most trusted source of information about how to dispose of ACMs even though at least 50 per cent don't operate a facility that accepts ACMs.

However, as the primary managers of waste collection local governments are an obvious place for people to look for this information.

This and other research confirms that local governments have the capacity to raise awareness in the community about asbestos safety. There are numerous examples of local governments delivering asbestos awareness campaigns and other initiatives to support people handle asbestos safely. At least 108 local governments were identified as delivering asbestos safety campaigns or initiatives beyond just having information on their websites, in newsletters or participating in Asbestos Awareness month. This is around 20 per cent of local governments nationally. While this could be an underestimate due to the availability of data, it suggests that the majority of local governments are not active in this space beyond providing information on websites. Furthermore, no references to asbestos were found on 23 per cent of local government websites, predominantly those in rural and remote areas. Nonetheless local governments clearly can play a role in attempting to improve community and residential asbestos safety.

The capacity of local governments to improve residential asbestos safety probably does not extend to the development application process to the extent that other research has suggested. Planning regulations exempt minor home renovations from development consent with only demolition or structural/load bearing work requiring development consent. Furthermore, due to resource constraints many local governments devolve principle certifying authority for developments to private certifiers. Although these certifiers are supposed to monitor compliance against development consent, local governments have limited oversight of this.

### 9.3 A possible evidence-based framework for local government to improve asbestos safety

The effectiveness of current and past local government actions in this space have either not been evaluated or the results of evaluations are not publically available. Therefore, there is no available evidence to support any particular course of action by local governments to improve community or residential asbestos safety. In the national survey, local governments themselves indicated that the majority of their activity in this space revolves around disseminating information on their websites and by other means such as newsletters and factsheets and pamphlets in customer service centres. The focus groups with local government staff also indicated that local governments also reactively educate residents in response to community complaints. When asked in the survey how effective these actions are, most local governments did not rate them as highly effective. Those local governments that reported delivering more comprehensive actions such as providing asbestos handling kits or asbestos removal services rated these actions as more effective. The evidence-base behind this view of effectiveness is unclear but focus groups suggested that this evidence is likely to be limited to their perception.

The four models of behaviour change discussed in Section 8 provide evidence for a framework for local governments to implement a comprehensive response to improve asbestos safety in their LGAs. The frameworks provided by social practice theory and DEFRA's 4 E's suggest that local governments should implement a multi-faceted response to asbestos safety that includes:

- > Campaigns and messaging about the risks of asbestos, how to safely handle and dispose of ACMs, and the costs of illegal dumping

- > Implementing affordable and convenient options for people to safely remove and dispose of ACMs
- > Leading by example by implementing asbestos policies or management plans, and ensuring the safe handling of ACMs in public buildings and infrastructure
- > Sustaining efforts to ensure that messages are reinforced to embed behaviour.

Nudge Theory and the Health Belief Model nuance this framework suggesting that messages will be most effective if they:

- > Are personalised and directly delivered to target cohorts (e.g. DIY renovators)
- > Personalise the risk of poor practice and exposure to the individual themselves
- > Appeal to a sense of fairness by highlighting the health and cost implications of poor and illegal practice around asbestos safety on others and the community
- > Provide positive feedback where measurable behaviour change, such as a reduction in illegal dumping, is realised and communicating this as benefits to the community

The survey and online discussion forums with homeowners provide additional insights into how local governments can effectively deliver community campaigns and messages about asbestos safety:

- > Local government websites are an important place for local governments to provide information to their communities about asbestos safety. However, this needs to be promoted to residents. Based on the literature review and review of local government websites the information also needs to be comprehensive, maintained and organised such that it is easy for residents to find.
- > Local governments could offer workshops and information sessions for residents as an effective means of promoting asbestos safety. Some local governments already do this. Although hardware stores are not a trusted source of information about asbestos safety they are a place that home renovators and tradespeople congregate. This suggests an opportunity for local governments to partner with major hardware stores to provide DIY home renovators a hands-on and interactive educational experience about asbestos safety. One possibility could be to offer subsidies for protective equipment and asbestos removal kits for those that engage. However, given local government views about resource constraints they might require support to deliver such events.
- > Although mail outs is not the preferred way for people to receive information about asbestos safety, it is a preferred way for people to receive information from local governments. This suggests that local governments could include some targeted information to residents as part of mail outs such as rates notices. Brief information about how to dispose of asbestos, how to report illegal dumping and how to report suspected unsafe handling of asbestos could theoretically be disseminated this way.

## 9.4 Supporting local governments to deliver an evidence-based framework to improve asbestos safety

Local governments identified a number of challenges that would impact their ability to implement the evidence-based asbestos safety campaign above. The survey and focus groups



with local governments clearly identified resource constraints as a barrier for local governments to deliver asbestos awareness campaigns, implement initiatives and enforce asbestos-related regulations.

Local governments generally do not have resources dedicated to asbestos safety with responsibility spread across multiple divisions or departments. Environmental health or public health teams generally have primary responsibility for community asbestos safety. However, these teams have responsibility for a range of issues including food safety, water safety, cooling towers and other hazardous waste. Asbestos is not necessarily the main part of the roles meaning they have limited time to devote to implementing asbestos safety campaigns and initiatives. It was stated by a number of local governments during focus groups that a suite of resources to use for community education would help them overcome some of their capacity constraints and ensure that the messages they are communicating are up to date. This includes factsheets, webpage content and community safety announcements for local print media and newsletters.

State government grants and initiatives such as the NSW Household Asbestos Disposal Scheme and soon to be implemented Queensland Asbestos Disposal Pilot provide funds to boost the capacity of local governments to implement asbestos safety initiatives. There is clearly an opportunity to continue grant funding to support local governments deliver asbestos safety initiatives such as workshops and information sessions, and asbestos removal and disposal programs. In particular, the results of this research suggest that supporting local governments deliver experiential marketing campaigns would be effective. 'Betty the ADRI House' is one example of such a campaign but has limited capacity to reach all local governments across Australia.

Grant funding is unlikely to reach all local governments and grant funded initiatives are often not sustainable unless there is a commitment to allocate internal resources to continue activities beyond the duration of funding. Local governments in some states face fiscal constraints from rate capping or pegging and amalgamations also leave local governments uncertain about service configurations and budgets. For some local governments to commit additional resources to asbestos safety a business case outlining the economic and social benefits of various actions could be required. This means supporting local governments to capture the costs of improper handling and disposal of ACMs so that they can estimate the benefits of implementing various actions. It is also important that state government initiatives and grants programs to support local governments are rigorously evaluated to demonstrate the relevant benefits for local governments to continue investment.

Another challenge reported by local governments is a lack of clarity about their roles and responsibilities for managing community asbestos safety. This is less of an issue in NSW where the *Model Asbestos Policy for Local Governments* has been implemented and used by around half of all local governments as a template for their own asbestos policies. The model policy clearly articulates the roles and responsibilities of local governments in the context of NSW State Government responsibilities. There is clear merit in encouraging other states and territories to adopt similar model policies to ensure broader consistency in the actions by local governments to improve community and residential asbestos safety. Clear roles and responsibilities also make asbestos-related resource allocation decisions clearer for local governments.

Although not explicitly confirmed during this research, it is unclear if local governments are aware of what a comprehensive evidence-based response is. This makes it important that research such as this is promoted to local governments but also that tools are available for local governments to benchmark their response to asbestos safety.

Local Government Professionals Australasia currently offers a benchmarking survey to local governments as part of their performance excellence program. The survey allows local governments to benchmark their performance against other local governments across:

- > Corporate leadership
- > Finance management
- > Operations management
- > Risk management
- > Workforce management
- > Service delivery

The actual survey items are not publically available so it was not possible to assess whether this survey could be applicable for local governments to benchmark their response to asbestos safety. However, the survey appears to revolve around quantifiable metrics such as service volumes, costs and staffing data. The survey is designed to enable local governments to make better management and operational decisions, prioritise and optimise their resources, drive change internally, enhance their strategic capacity and operational planning as well as support specific service delivery enhancements. The survey is not used to benchmark organisational performance against specific issues such as asbestos safety. However, theoretically if data was collected it might be applicable to benchmark the management of asbestos containing waste and illegal dumping.

Another benchmarking option comes from the disability access and inclusion space where similarly there is variable understanding across local governments about what constitutes a comprehensive response by local government. A survey currently being trialled in South Australia presents local governments with an 'achievement scale' across a range of evidence-based actions to support the access and inclusion of people with disability. Local governments can assess the level of their actions on this scale to 'benchmark' their response against best practice and identify where they need to improve. It is possible that a similar scale could be developed around asbestos safety, although encouraging uptake by local government could be challenging.

## 10References

Armstrong, B., Driscoll, T., 2016, Asbestos-related mesothelioma in Australia: cresting the third wave. *Public Health Research and Practice*, 26(2).

ASEA & ACIL Allen, 2016, *Illegal asbestos dumping: Review of issues and initiatives* (Final report) Published on the ASEA website:

<[www.asbestossafety.gov.au/sites/asbestos/files/2016/05/ASEA\\_Report\\_Illegal\\_Asbestos\\_Dumping\\_Issues\\_and\\_Initiatives\\_final\\_ACC.pdf](http://www.asbestossafety.gov.au/sites/asbestos/files/2016/05/ASEA_Report_Illegal_Asbestos_Dumping_Issues_and_Initiatives_final_ACC.pdf)>.

ASEA & Asbestoswise, 2016, *Third wave awareness programme – learning to limit the third wave* (Draft report).

ASEA & Matrix on Board Consulting, 2017, *Remote Australian communities: the asbestos legacy* (Final report) Published on the ASEA website:

<[www.asbestossafety.gov.au/sites/asbestos/files/2017/04/ASEA\\_Report\\_asbestos\\_in\\_Remote\\_communities\\_April2017.pdf](http://www.asbestossafety.gov.au/sites/asbestos/files/2017/04/ASEA_Report_asbestos_in_Remote_communities_April2017.pdf)>.

ASEA, Blue Environment & Randell Environmental Consulting, 2017, *Best practice governance of waste asbestos transport, storage and disposal – a discussion paper* (Final)

[www.vwma.com.au/wp-content/uploads/2017/04/2017\\_04-AsbestosTransportStorageDisposal\\_discussionPaper.pdf](http://www.vwma.com.au/wp-content/uploads/2017/04/2017_04-AsbestosTransportStorageDisposal_discussionPaper.pdf)

ASEA & Picken, J. and Randell, P., 2015, *Asbestos Waste in Australia*, Blue Environment (Final report) Published on the ASEA website:

<[www.asbestossafety.gov.au/sites/asbestos/files/2016/03/ASEA\\_Report\\_Asbestos\\_waste\\_in\\_Australia\\_final\\_ACC\\_1.pdf](http://www.asbestossafety.gov.au/sites/asbestos/files/2016/03/ASEA_Report_Asbestos_waste_in_Australia_final_ACC_1.pdf)>

ASEA & Desai, R., 2015, *Asbestos Communication in Australia Research Report*, Murdoch University (Draft report).

ASEA & Durosielle, A., Cook, L., Gray, C., Reid, A., 2015, *Evidence based report on the risks of asbestos exposure in the Australian community*, Curtin University (Draft report).

ASEA & EY Sweeney, 2016a, *DIY Home Renovators* (Draft report).

ASEA & EY Sweeney, 2016b, *Attitudes to residential asbestos survey* (Final report) Published on the ASEA website:

<[www.asbestossafety.gov.au/sites/asbestos/files/2016/03/ASEA\\_Report\\_Attitudes\\_residential\\_asbestos\\_assessments\\_final\\_ACC.pdf](http://www.asbestossafety.gov.au/sites/asbestos/files/2016/03/ASEA_Report_Attitudes_residential_asbestos_assessments_final_ACC.pdf)>.

ASEA & Ithaca Group, 2016, *Looking ahead: Issues arising from the development of best practice case studies in asbestos management* (Draft report) & *Alert, Alarmed, Strong and Skilled: a plan for influencing trades* (Draft report).

ASEA & Monash University, 2016, *Measurement of asbestos fibre release during removal works in a variety of DIY scenarios* (Final report). Published on the ASEA website: Published on the ASEA website:

<[www.asbestossafety.gov.au/sites/asbestos/files/2016/07/ASEA\\_Report\\_fibre\\_release\\_in\\_DIY\\_scenarios\\_ACC\\_JULY16.pdf](http://www.asbestossafety.gov.au/sites/asbestos/files/2016/07/ASEA_Report_fibre_release_in_DIY_scenarios_ACC_JULY16.pdf)>

Becker, M, H., (ed), 1974, *The Health Belief Model and Personal Health Behaviour*. Thorofare, NJ: Charles B. Slack.

Beer, A., Marris, A., and Paris, C., 2014, *Housing and Local Government in Australia in the 21<sup>st</sup> Century*. Australian Centre of Excellence for Local Government.

Darton, A., 2008, *GSR behaviour change knowledge review. Reference Report: An overview of behaviour change models and their uses*. London: HMT Publishing Unit.

Forest Research, 2012, *Theories and models of behaviour change*. Viewed 28 March 2017, <[www.forestry.gov.uk/pdf/behaviour\\_review\\_theory.pdf/\\$FILE/behaviour\\_review\\_theory.pdf](http://www.forestry.gov.uk/pdf/behaviour_review_theory.pdf/$FILE/behaviour_review_theory.pdf)>.

Hyder Consulting, 2011, Role and performance of local government: waste and recycling related data and information, <[www.environment.gov.au/system/files/resources/42d277a1-1edd-4b48-977c-5beb591c0f0b/files/local-government.pdf](http://www.environment.gov.au/system/files/resources/42d277a1-1edd-4b48-977c-5beb591c0f0b/files/local-government.pdf)>.

Jackson, T., 2005, *Motivating Sustainable Consumption: a review of evidence on consumer behaviour and behavioural change*. Sustainable Development Research Network.

John, R., and Robb, J., 2017, Using behavioural insights for citizen compliance and cooperation, *Evidence Base*, 1: 1-14.

Murphy, K., 2008. Enforcing tax compliance: to punish or persuade, *Economic Analysis and Policy*, 38: 113-135

NSW Division of Local Government, Department of Premier and Cabinet. 2012, *Model Asbestos Policy for NSW Councils*, <[www.olg.nsw.gov.au/sites/default/files/Model-Asbestos-Policy-for-NSW-Councils-November-2012.pdf](http://www.olg.nsw.gov.au/sites/default/files/Model-Asbestos-Policy-for-NSW-Councils-November-2012.pdf)>

NSW Department of Premier and Cabinet. 2016, *Behavioural Insights in NSW, Update Report 2016*, <[www.bi.dpc.nsw.gov.au/assets/Behavioural-Insights/Library/Behavioural-Insights-in-NSW-2016.pdf](http://www.bi.dpc.nsw.gov.au/assets/Behavioural-Insights/Library/Behavioural-Insights-in-NSW-2016.pdf)>.

NSW Government. 2011, *Asbestos Blueprint: A guide to the roles and responsibilities of operational staff of state and local government*, <[www.safework.nsw.gov.au/data/assets/pdf\\_file/0018/52146/heads\\_asbestos\\_coordination\\_authorities\\_asbestos\\_blueprint.pdf](http://www.safework.nsw.gov.au/data/assets/pdf_file/0018/52146/heads_asbestos_coordination_authorities_asbestos_blueprint.pdf)>.

NSW Office of Local Government. 2015, *Model Asbestos Policy for NSW Councils*, <[www.lgnsw.org.au/policy/asbestos-model-policy](http://www.lgnsw.org.au/policy/asbestos-model-policy)>.

NSW Ombudsman. 2010. *Responding to the Asbestos Problem - The Need for Significant Reform in NSW*. Sydney, NSW: New South Wales Ombudsman, <[www.ombo.nsw.gov.au/news-and-publications/publications/reports/state-and-local-government/responding-to-the-asbestos-problem-the-need-for-significant-reform-in-nsw](http://www.ombo.nsw.gov.au/news-and-publications/publications/reports/state-and-local-government/responding-to-the-asbestos-problem-the-need-for-significant-reform-in-nsw)>.

NSW Ombudsman. 2017. How NSW government agencies deal with the problem - A Special Report to Parliament. Sydney, NSW: New South Wales Ombudsman <[www.ombo.nsw.gov.au/data/assets/pdf\\_file/0006/43647/Asbestos-How-NSW-govt-agencies-deal-with-the-problem-April2017.pdf](http://www.ombo.nsw.gov.au/data/assets/pdf_file/0006/43647/Asbestos-How-NSW-govt-agencies-deal-with-the-problem-April2017.pdf)>.

Olsen, N, J., Franklin P, J., Reid, A., Klerk, N., Threlfall, T., Shilkin, K., Musk, B., 2011, Increasing incidence of malignant mesothelioma after exposure to asbestos during home maintenance and renovation. *The Medical Journal of Australia* 195(5), 271-274.

Park, E., Yates, D., Hyland, RA., Johnson, AR., 2013, Asbestos exposure during home renovation in New South Wales. *The Medical Journal of Australia*, 199(6), 410-413.

Rosemary, J., Korda, M, S, C., Armstrong, B., Trevenar, S, M., Kirk, M, D., 2015, *Descriptive Study of Mesothelioma in the Australian Capital Territory. A. Government*. Australian National University,

<[www.nceph.anu.edu.au/files/ACTAsbestosHealthStudy\\_Report\\_Component%201.pdf](http://www.nceph.anu.edu.au/files/ACTAsbestosHealthStudy_Report_Component%201.pdf)>.

Rosenstock, I, M., 2005, Why people use health services. *Milbank Memorial Fund Quarterly*, Volume 44.

Reckwitz, A., 2002, Toward a Theory of Social Practices: A development in Culturist Theorizing, *European Journal of Social Theory*, 5(2), 243-263.

Sharma, M., and Romas, J, A., 2012, *Theoretical Foundations of Health Education and Health Promotion*. London: Jones and Barlett Learning.

Thaler, R., and Sunstein, C., 2008, *Nudge: Improving decisions about health, wealth and Happiness*. Yale CN:Yale University Press.

Western Australian Department of Health, 2011, *Survey of Local Government and other regulator's experience with asbestos incidents in the public sector*,

<[www.health.wa.gov.au/~media/Files/Corporate/general%20documents/Asbestos/PDF/Local-Council-Asbestos-Survey-Report.ashx](http://www.health.wa.gov.au/~media/Files/Corporate/general%20documents/Asbestos/PDF/Local-Council-Asbestos-Survey-Report.ashx)>.

Wiesal, I., Freestone, R, Randolph, B., 2013, Owner-Driven Suburban Renewal: Motivations, Risks and Strategies in 'Knockdown and Rebuild' Processes in Sydney, Australia. *Housing Studies*, doi:10.1080/02673037.2013.758243,

<[www.be.unsw.edu.au/sites/default/files/upload/pdf/cityfutures/publications/Owner-Driven%20Suburban%20Renewal%20Motivations,%20Risks%20and%20Strategies%20in%20%E2%80%98Knockdown%20and%20Rebuild%E2%80%99%20Processes%20in%20Sydney,%20Australia.pdf](http://www.be.unsw.edu.au/sites/default/files/upload/pdf/cityfutures/publications/Owner-Driven%20Suburban%20Renewal%20Motivations,%20Risks%20and%20Strategies%20in%20%E2%80%98Knockdown%20and%20Rebuild%E2%80%99%20Processes%20in%20Sydney,%20Australia.pdf)>.

## Appendix A. Approach and methods

The staged approach used to undertake this research has involved:

- > A review of research previously commissioned by the Asbestos Safety and Eradication Agency (ASEA) and other academic and 'grey' literature
- > A review of all local government websites across Australia for content on asbestos
- > A national survey of local governments about their role in managing asbestos safety in their communities
- > A series of interviews or focus groups with local governments
- > Two online discussion forums with DIY home renovators

Detailed methods for each of these activities are outlined below.

### 10.1 Literature review

Research previously commissioned by ASEA into asbestos safety and other academic and grey literature was reviewed to provide insights into:

- > The nature of the relationship local governments typically have with residents
- > Key stakeholders in education about the safe handling of ACMs
- > The current roles local governments play in their jurisdictions and the reasons for this, including a consideration of the legislative roles and responsibilities of local governments
- > Costs of handling ACMs to local governments including clean-ups
- > Various models and initiatives used by local governments for education about ACMs and disposal including waste collection services, and whether they are, or were, effective
- > Evidence of effective collaboration with other parties including other local governments and private industry organisations
- > Evidence based strategies to influence behavioural change
- > The enablers (drivers) and barriers to education and behavioural change of the target group by local governments and other agencies.

Published academic and 'grey' literature from Australia and overseas were identified through a combination of ASEA knowledge and key term searches using the *PubMed* and *informIT* online databases and Google. Key terms searched against were:

- > Asbestos OR ACMs
- > Asbestos AND (local government OR councils)
- > Asbestos (international context)
- > Behaviour change theories
- > Asbestos exposure AND (Mesothelioma)
- > Hazardous waste management.



Additional relevant publications were identified from references in publications retrieved by the first round of database and internet searching.

Literature was reviewed for relevance against the aims of the desktop review and then thematically reviewed and summarised according to the headings above.

## 10.2 Review of local government websites

The review of local government websites was undertaken in two complimentary ways. Initially 543 local government websites (representing all local governments in Australia) were reviewed for content related to asbestos. This was complemented by an automated scan, or 'scrape' of all local government websites to identify any references missed during the manual scan. The combined manual and automated scans identified 4,336 references to asbestos on local government websites across Australia.

After removing inactive links, references from before 2010 (as these were deemed highly likely to be out-dated), links to Council meeting minutes and agenda documents that mention asbestos, annual reports and links to tenders or budgets that mention asbestos, 1,513 asbestos-related observations remained. Of these, 155 were internal local government documents such as asbestos or asbestos-related policies, legislation and regulations that guide local governments on their internal and community roles and responsibilities for to asbestos safety. The remaining 1,358 observations were coded according to the framework outlined below.

TABLE A3: CODING FRAMEWOK FOR CODING OF LOCAL GOVERNMENT WEBSITES

	Description
<b>Council Classification</b>	Metropolitan, regional or rural and remote. <sup>9</sup>
<b>LGA likely to contain high DIY renovation activity</b>	As identified by information provided by ASEA
<b>LGA likely to contain high amounts of natural asbestos</b>	As identified by information provided by ASEA
<b>Type of Resource</b>	<ul style="list-style-type: none"> <li>Factsheet/Document</li> <li>Checklist</li> <li>Webpage</li> <li>Council newsletter/briefing</li> <li>Video</li> <li>Others (Application forms, etc.)</li> </ul>

<sup>9</sup> Council classifications have been obtained from Table F2 'categories of local governments by state at July 2014' in Appendix F of the Local Government National Report 2014-2015. We have classified all urban councils as Metro, all Urban regional councils as Regional, and all Rural councils have been retained as Rural. Link to report: [http://regional.gov.au/local/publications/reports/2014\\_2015/LGN\\_REPORT\\_2014-15.pdf](http://regional.gov.au/local/publications/reports/2014_2015/LGN_REPORT_2014-15.pdf)

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**Information on a council organised/delivered asbestos related initiative or event**

Asbestos/removal disposal  
Providing asbestos removal kits  
Asbestos safety information sessions or workshops  
Asbestos testing or inspection service  
Illegal dumping  
Note: This does not include councils promoting Asbestos Awareness Weeks or Days, or information sessions/workshops organised and delivered by other organisations, These have not been considered Council initiated.

**Topic of Resource**

Asbestos as a health hazard  
Asbestos removal and/or disposal  
Illegal dumping of asbestos  
Asbestos identification  
DIY renovation/demolition

**Intended Audience**

Homeowners/residents  
Commercial tradespeople  
Business owners

**Target demographic groups**

All  
Aboriginal and Torres Strait Islander  
Culturally and linguistically diverse (CALD)

**Where on council website is the resource found - i.e. which department or service**

Environmental health/environmental services  
Building services/planning/development/engineering  
Waste management  
Public health/public safety  
Community services/community directory  
Property or home services  
Emergency management  
Laws and regulations  
Publications  
General FAQs/common enquiries/forms and information  
General assets/files/scripts/documents (department/division unspecified)  
News and media releases

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Other (e.g. general services, activities, events, community information)

### 10.3 Focus groups with local governments

Key local government stakeholders responsible for managing asbestos safety were identified from expressions of interest to a request for follow up in the national survey of local governments in the previous phase of this project. The 14 local governments to take part were selected based on:

- > Evidence from the website review and national survey that they are delivering initiatives to improve asbestos safety beyond distributing educational material
- > Their LGA having a high proportion of housing stock likely to have ACMs based on information provided by ASEA
- > Evidence that their LGA has high amounts of natural asbestos.

Local governments from a mixture of states and territories and locations (i.e. metropolitan, regional and rural and remote) were selected.

The final list of staff and their local governments is at Appendix B and the discussion guide is at Appendix C.

The responses from all interviews were manually synthesised and coded to qualitatively draw out key themes.

### 10.4 Online discussion forums with homeowners

Homeowners were selected for online discussion forums using a third party market research provider. Members of an online panel were asked to confirm that they live in one of the target postcodes and then screened for inclusion based on the following questions:

- > Do you own a house, townhouse, unit/apartment built before 1990?
- > Have you either renovated that house, townhouse, unit/apartment in the last two years or are you intending to renovate in the near future?
- > Did you, or are you intending to, undertake those renovations yourself?

The age and gender of participants was also captured.

Participants were divided into two groups and presented four questions per day for five days. They were able to answer these questions in their own time and interact with each other about their responses. The UTS researchers facilitated the discussion daily by probing for additional information and answering questions from participants.

The online discussion was recorded and transcripts manually synthesised and coded to qualitatively draw out key themes. The discussion guide for online forums with homeowners is at Appendix D.

Detail of the final sample for the discussion forums is outlined below:

TABLE A4: DISTRIBUTION OF SAMPLE FOR ONLINE DISCUSSION FORUMS WITH HOMEOWNERS

<b>LGA</b>	<b>State</b>	<b>Classification</b>	<b>Number of participants</b>
<b>Cumberland Council</b>	NSW	Metropolitan	15
<b>Parramatta City Council</b>	NSW	Metropolitan	16
<b>Wollongong City Council</b>	NSW	Regional	14
<b>Ballina Shire Council</b>	NSW	Regional	5
<b>Mornington Peninsula Shire Council</b>	VIC	Metropolitan	9
<b>Latrobe City Council</b>	VIC	Metropolitan	9
<b>Wellington Shire Council</b>	VIC	Regional	4
<b>Logan City Council</b>	QLD	Metropolitan	12
<b>Mackay Regional Council</b>	QLD	Regional	6
<b>City of Port Adelaide Enfield</b>	SA	Metropolitan	6
<b>Wakefield Regional Council</b>	SA	Regional	1
<b>City of South Perth Council</b>	WA	Metropolitan	4
<b>Latrobe Council</b>	TAS	Rural and remote	2

The age and gender breakdown of respondents are as follows.

TABLE A5: AGE AND GENDER DISTRIBUTION OF SAMPLE FOR ONLINE DISCUSSION FORUMS WITH HOMEOWNERS

<b>Number of participants</b>	
<b>Age</b>	
<b>18-24</b>	8
<b>25-34</b>	21
<b>35-44</b>	32
<b>45-54</b>	29
<b>55-64</b>	13
<b>Gender</b>	
<b>Male</b>	41
<b>Female</b>	62

## 10.5 Surveys

### 10.5.1 National survey of local governments

The national survey was sent to all local 543 local governments across Australia. The survey analysed the following aspects of asbestos safety and management by local governments (see Appendix F):

- > Their current roles in raising awareness and knowledge about safely handling ACMs
- > The roles of local governments in improving residential and community asbestos safety
- > Key stakeholders in residential and community asbestos safety and management
- > Existing initiatives to support and improve community and residential asbestos safety
- > The enablers and challenges for managing community and residential asbestos safety
- > The use of asbestos policies

The table below shows the characteristics of the final sample including the categorical response rates.

TABLE A6: FINAL SAMPLE FOR THE NATIONAL SURVEY OF LOCAL GOVERNMENTS

	Responses	Response rate <sup>a</sup>
NSW	46	36%
NT <sup>b</sup>	1	6%
QLD	18	23%
SA	17	23%
TAS	12	41%
VIC	37	47%
WA	41	29%
Metropolitan	62	48%
Regional	41	38%
Rural and remote	69	23%
<i>Total</i>	<i>172</i>	<i>32%</i>

a. Response rate by state or territory, or remoteness

b. As there was only one respondent from the Northern Territory there is no discussion in this section of the report about local governments in the Northern Territory.

### 10.5.2 Survey of homeowner communication preferences

Prior to beginning the online discussion forums with home owners, participants completed a 'click and disappear' survey to elicit:

- > Trusted sources for various types of information about asbestos
- > Preferred modes of communication with local governments
- > Preferred modes of communication about various asbestos-related topics
- > Preferred modes of communication with local governments about various asbestos-related topics

For each question respondents were shown a list of seven or eight options and asked to select their least preferred (or least trusted) and most preferred (or most trusted) options. These options were removed and participants asked to select again from the remaining options. This continued until either one or no options remained. From this all options could be ranked from the most to least preferred (or most trusted).

For each respondent their preferences for each question were scored one for the least preferred (or least trusted) up to seven or eight for their most preferred (or most trusted). The scores for each option being assessed were summed across all respondents and then ranked to generate an order of preferences.

The advantage of this approach over standard ranking questions is that it forces choice between all options in a cognitively simple way. This provides greater discrimination between options in the middle of the ranking distribution.

The final survey is at Appendix E.

## 10.6 Limitations

The research has several limitations that should be considered when making generalised conclusions from the data.

### 10.6.1 National survey of local governments

The final sample is not representative by State and Territory or remoteness. In particular there is an over-representation of NSW, Victorian and metropolitan local governments and an under-representation of rural and remote local governments.<sup>10</sup>

### 10.6.2 Focus groups with local governments and online surveys and discussion forums with homeowners

The local governments selected for focus groups and the participants in the online discussion forums are not representative. Local governments were intentionally selected based on the previously mentioned criteria rather than as a stratified random sample. The focus groups are intended to illustrate certain points about local government's role in asbestos safety as an extension from the previous phases of research rather than generate representative data.

Furthermore, no local governments from Queensland or South Australia participated in this phase of the research. In the national survey six local governments in Queensland and two from South Australia expressed interest in participating. However, when followed up none of these local governments agreed to participate. This resulted in 10 of the 14 local governments participating coming from NSW or Western Australia.

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<sup>10</sup> Using a chi-squared goodness-of-fit test the final sample is not representative by State and Territory ( $\chi^2(6) = 13.991$ ,  $p = 0.030$ ) or remoteness ( $\chi^2(2) = 19.338$ ,  $p < .0001$ ).



The participants in the online discussion forums are also likely to have hidden characteristics that predispose them to participating in such forums. Therefore it is unlikely that the participants are representative of all previous or current DIY renovators.



## Appendix B. List of local government stakeholders consulted

Local Government	State or territory	Location	Role
Ballina Shire Council	NSW	Regional	Environmental Health Officer  Strategic Waste Management Officer
Bourke Shire Council	NSW	Rural and remote	Manager Environmental Services
Cumberland Council	NSW	Metropolitan	Team Leader Resource Recovery  Manager Environment and Resource Recovery
The Municipality of Lane Cove Council	NSW	Metropolitan	Manager Environmental Health
City of Parramatta Council	NSW	Metropolitan	Manager Environmental Health and Compliance  Team Leader Environmental Health Compliance  Customer Service Manager
Wollongong City Council	NSW	Regional	Manager Environment and Conservation Services  Operations Manager  Promotions Coordinator for Waste Avoidance and Reuse  Workplace Health and Safety Coordinator

			Building and Certification Manager
Mornington Peninsula Shire Council	Victoria	Metropolitan	Team Leader Environmental Health
Wellington Shire Council	Victoria	Regional	Municipal Building Surveyor and Environmental Health Coordinator
Shire of Corrigin Council	Western Australia	Rural and remote	Environmental Health Officer
Coolgardie Shire Council Shire of Dumbleyung Gnowangerup Shire	Western Australia	Rural and remote	Environmental Health Officer
City of South Perth	Western Australia	Metropolitan	Environmental Health Coordinator
City of Subiaco	Western Australia	Metropolitan	Manager Operations and Environment Services Coordinator Environmental Health
Latrobe Council Kentish Council	Tasmania	Rural and remote	Manager Environmental Health
Victoria-Daly Regional Council	Northern Territory	Rural and remote	Environmental Health Officer

## Appendix C. Local government focus group discussion guide

### Questions

1. Could you please describe your role at Council, how long you have been in that role and what your responsibilities are around asbestos management?
2. Does your Council have an asbestos policy and/or an asbestos management plan?
  - *If yes, when did your Council adopt one and why?*
  - *If yes, what are the benefits of having an asbestos policy or management plan?*
  - *If yes, in what ways do you think the policy or use of the policy could be improved?*
  - *If no, is one being developed?*
3. What are the challenges your council faces managing asbestos safety in your LGA?
  - *What are the challenges promoting residential asbestos safety amongst DIY home renovators?*
4. What are the main types of complaints or notifications your Council receives around asbestos?
  - *Approximately how many do you receive per year and what is the trend over time?*
5. Who are the major risk groups around asbestos in your LGA?
6. Does your council have a waste facility that accepts ACMs?
  - *If yes, is this only small quantities residential ACMs?*
  - *If no, why not and is there a private facility nearby?*
  - *How do you promote waste facilities that accept ACMs?*
7. To what extent is the improper disposal and illegal dumping of ACMs an issue in your LGA?
  - *Who are the main perpetrators and why do you think these cohorts are dumping asbestos illegally?*
  - *Do you record illegal dumping and the clean-up costs, and if so what are the estimated costs to Council annually?*
8. What points of interaction do your parts of Council have with residents in your LGA?
  - *What are the types of things you communicate with your residents about?*
9. What are some of the ways your Council works to improve asbestos safety in your LGA?
  - *Probe, awareness and education campaigns, asbestos disposal services, the provision of asbestos removal kits, infringement notices and fines*
10. How does your Council specifically promote asbestos safety to DIY renovators?
  - *What points of interaction during the development application process does Council have with DIY renovators?*
  - *Is asbestos safety promoted at these points of contact and how?*
11. How does your council promote the use of residential asbestos surveys and licenced asbestos removalists?

- 
12. How effective have the actions or initiatives you have described in the previous sections been and what evidence do you have for this?
- *Do you have a successful initiative that has worked well, that could be shared with other councils?*
13. Whose role is it to maintain information about asbestos safety and management on the Council website?
- *What are your views on the information that is currently available on your website?*
  - *Have you received any feedback from residents on the website information and how it might be improved?*
  - *What are the main challenges around maintaining this information on the Council website and ensuring that it is accurate and relevant?*
14. How does your council inform residents of any maintenance that is being conducted on buried asbestos-cement water pipes and other utility pipes?
15. Are there areas of naturally occurring asbestos in your LGA?
- *How do you manage the risk to residents?*
16. What could your Council do to better encourage asbestos safety amongst homeowners in your LGA?
17. Would you be receptive to any of the following and do you think that they would be effective?
- *The introduction of a short online asbestos safety video for residents submitting a Development Application*
  - *Insertion of an 'acknowledgement tick box' on a Development Application form that states the applicant is aware of asbestos risks and a variety of other possible solutions*
  - *An online detailed check list stage in the Development Application process, which comprises some typical asbestos removal awareness matters which would provide a check on what residents say they know and don't know*
  - *Inclusion of asbestos information in the form of leaflets or booklets which could be included with Development Applications*
  - *Inclusion of home renovation asbestos safety article in local government community newsletters*
  - *Addition of asbestos disposal advice to a calendar of waste disposal for distribution to residents*
  - *Adoption of a smart phone application facility allowing residents to inform local government of instances of illegal dumping*
18. Is there anything that your State and the Commonwealth governments could do to help local governments better educate home owners about asbestos safety?
- *What about your local government association?*
-



## Appendix D. Online forum discussion guide

### Question

1. Could you please describe how long you have lived in your area and your current home?
  - *Have you done or are you planning any renovations on this or previous homes?*
  - *Did you do these yourself or use a builder?*
2. Are you aware if your current home or the home you have renovated contains asbestos?
  - *Where in your home do you think you would find asbestos?*
3. When you purchased your home, did you have an asbestos survey or assessment undertaken?
  - *Why or why not?*
  - *Did you know whether your house contained asbestos before you purchased it?*
  - *Was that an issue or concern for you?*
4. Can you please describe to me the risks of exposure to asbestos and what you think can happen if you are exposed?
  - *Who do you think is at risk of exposure?*
  - *Do you think you are at risk of exposure?*
  - *Why or why not?*
5. Can you please tell me some of the things that you need to do to handle asbestos safely?
  - *How do you know this?*
6. What are some of the things that you currently make contact with your local council about?
  - *How often would you contact council?*
  - *How do you make that contact? (e.g. phone, internet, walk in to customer service centre)*
7. How often do you receive correspondence from your local council?
  - *What is it about? (e.g. rubbish, rates, other)*
  - *How do they provide this correspondence to you? (e.g. mail, newsletter, social media, internet)*
8. How do you like or prefer to get information from your Council?
  - *Probe internet, social media, text message, rates notices*
  - *Why this preference?*
9. Can you please tell me some of the places you have gone to get information about asbestos?
  - *Probe risks, identification, safe handling and disposal*
10. What information about asbestos do you go to your local Council for?
  - *On website or customer service centre or over phone, rates notices?*
  - *Probe risks, safe handling, removal and disposal*

11. Does your local Council provide you information about asbestos any other way? (e.g. via rates notices)
12. When you started planning for your renovations did you have to submit plans and get approval from your local council?
  - *What information did you have to provide related to asbestos?*
  - *Did your council provide you with any information about asbestos once you submitted your application?*
13. How useful is the information that you have looked at about asbestos?
  - *Is some more useful than others and if so why?*
  - *Is information from certain sources more useful than others?*
  - *How useful is the information available from council?*
  - *What would you like to see your council providing that it doesn't already provide?*
14. Can you describe some of the other things that your local government does to help people safely handle asbestos?
  - *Probe awareness with council specific initiatives identified through earlier project phases will be council specific*
  - *Where relevant, have you used or attended any of these?*
15. Can you please tell me the regulations about the amount of asbestos containing materials that homeowners are allowed to remove themselves?
  - *How do you know this?*
  - *What if you need to remove more than this amount?*
  - *Are you aware of any asbestos removalists in your area? If so where did you find out about these?*
16. Did you (or would you) consider using a licensed asbestos removalist to remove asbestos containing materials for your DIY renovations?
  - *Why or why not?*
  - *What would make you consider using a licenced removalist?*
17. Can you please tell me some of the precautions that you need to take to handle asbestos safely?
  - *Where did you find out about this?*
  - *Did you take these precautions? If not why not?*
18. Can you please tell me where you can dispose of asbestos containing materials in this area?
  - *Do you know how much this costs and how much you are able to dispose of?*
  - *Do you find this expensive?*
  - *Do you know how asbestos containing materials must be delivered to a waste facility (i.e. wrapped)?*
  - *How convenient is it for you to go to the nearest waste facility that accepts asbestos containing materials?*
19. What would (or would have) make it easier for you to safely handle and dispose of asbestos containing materials?
  - *Do you think your council could help you with any of these things?*

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20. Is there anything else that you would like to add?

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## Appendix E. Survey of homeowner communication preferences

**Q1: Please rate your most and least trusted sources for information about the health risks of exposure to asbestos.**

Most preferred  
(please select one)

Least preferred  
(please select one)

	State government	
	Hardware store	
	Local council	
	Builders/tradespeople	
	Building certifier	
	Friends or Family	
	Federal government	

*Notes: Randomise order*

*Repeat question three times, removing the most and least preferred each time*

**Q2: Please rate your most and least trusted sources for information about how to identify asbestos.**

Most preferred  
(please select one)

Least preferred  
(please select one)

	State government	
	Hardware store	
	Local council	
	Hardware store	
	Builders/tradespeople	
	Building certifier	
	Friends or Family	
	Federal government	

*Notes: Randomise order*

*Repeat question three times, removing the most and least preferred each time*

**Q3: Please rate your most and least trusted sources for information about how to safely handle asbestos containing materials.**

Most preferred  
(please select one)

Least preferred  
(please select one)

	State government	
	Hardware store	
	Local council	
	Builders/tradespeople	
	Building certifier	
	Friends or Family	
	Federal government	

*Notes: Randomise order*

*Repeat question three times, removing the most and least preferred each time*

**Q4: Please rate your most and least trusted sources for advice about home renovations?**

Most preferred  
(please select one)

Least preferred  
(please select one)

	State government	
	Hardware store	
	Local council	
	Builders/tradespeople	
	Building certifier	
	Friends or Family	
	Federal government	

*Notes: Randomise order*

*Repeat question four times, removing the most and least preferred each time*

**Q5: Please rate your most and least trusted sources for information about how to legally dispose of asbestos containing materials?**

Most preferred  
(please select one)

Least preferred  
(please select one)

	State government	
	Hardware store	
	Local council	
	Builders/tradespeople	
	Building certifier	
	Friends or Family	
	Federal government	

*Notes: Randomise order*

*Repeat question three times, removing the most and least preferred each time*

**Q6: Please rate your most and least preferred method of communication about the health risks of asbestos?**

Most preferred  
(please select one)

Least preferred  
(please select one)

	Social media	
	Internet	
	Mail/post	
	Television	
	Radio	
	Workshops/information sessions	
	Telephone (including SMS)	
	One-on-one in person	

*Notes: Randomise order*

*Repeat question four times, removing the most and least preferred each time*

**Q7: Please rate your most and least preferred method of communication about how to identify asbestos?**

Most preferred  
(please select one)

Least preferred  
(please select one)

	Social media	
	Internet	
	Mail/post	
	Television	
	Radio	
	Workshops/information sessions	
	Telephone (including SMS)	
	One-on-one in person	

Notes: Randomise order

Repeat question four times, removing the most and least preferred each time

**Q8: Please rate your most and least preferred method of communication about how to safely handle asbestos?**

Most preferred  
(please select one)

Least preferred  
(please select one)

	Social media	
	Internet	
	Mail/post	
	Television	
	Radio	
	Workshops/information sessions	
	Telephone (including SMS)	
	One-on-one in person	

Notes: Randomise order

Repeat question four times, removing the most and least preferred each time

**Q9: Please rate your most and least preferred method of communication about how to legally dispose of asbestos?**



Most preferred  
(please select one)

Least preferred  
(please select one)

	Social media	
	Internet	
	Mail/post	
	Television	
	Radio	
	Workshops/information sessions	
	Telephone (including SMS)	
	One-on-one in person	

*Notes: Randomise order*

*Repeat question four times, removing the most and least preferred each time*

**Q10: Please rate your most and least preferred method of communication for advice about home renovations?**

Most preferred  
(please select one)

Least preferred  
(please select one)

	Social media	
	Internet	
	Mail/post	
	Television	
	Radio	
	Workshops/information sessions	
	Telephone (including SMS)	
	One-on-one in person	

*Notes: Randomise order*

*Repeat question four times, removing the most and least preferred each time*

**Q11: Please rate your most and least preferred method for receiving information in general from your local council?**

Most preferred  
(please select one)

Least preferred  
(please select one)

	Social media	
	Internet	
	Mail/post	
	Television	
	Radio	
	Workshops/information sessions	
	Telephone (including SMS)	
	Customer service centre	

Notes: Randomise order

Repeat question four times, removing the most and least preferred each time

**Q12: Please rate your most and least preferred method for receiving information in general from your State or Territory Government?**

Most preferred  
(please select one)

Least preferred  
(please select one)

	Social media	
	Internet	
	Mail/post	
	Television	
	Radio	
	Workshops/information sessions	
	Telephone (including SMS)	
	Customer service centre	

Notes: Randomise order

Repeat question four times, removing the most and least preferred each time

**Q13 Please rate your most and least preferred method for receiving information in general from the Federal Government?**

Most preferred  
(please select one)

Least preferred  
(please select  
one)

	Social media	
	Internet	
	Mail/post	
	Television	
	Radio	
	Workshops/information sessions	
	Telephone (including SMS)	
	Customer service centre	

*Notes: Randomise order*

*Repeat question four times, removing the most and least preferred each time*

#### **Demographic questions**

**Could you please indicate your age?**

**Could you please indicate your gender?**

**Could you please indicate the postcode that you live in?**

## Appendix F. National survey of local governments

Question	Response options	Domain	Notes
1. Which of the following is a responsibility of your council in the context of asbestos management?	<p>&lt;select all that apply&gt;</p> <ul style="list-style-type: none"> <li>• Raising awareness and educating the community on the identification and safe removal of asbestos</li> <li>• Managing asbestos in council buildings</li> <li>• Managing contaminated land sites</li> <li>• Managing naturally occurring asbestos on public land</li> <li>• Managing asbestos waste by providing or maintaining infrastructure to collect and dispose asbestos containing waste</li> <li>• Managing and regulating the illegal dumping of asbestos containing materials</li> <li>• Managing asbestos removal and disposal in case of emergencies</li> <li>• Ensuring compliance to key asbestos related regulation and policies by home owners</li> <li>• Collaborating with other government agencies and external stakeholders in order to respond to asbestos issues</li> <li>• Other__ &lt;please specify&gt;</li> </ul>	Situations where the responsibility for asbestos safety and management lie with the local government	
2. How important is each of the following roles in the context of asbestos management in your LGA?	<p>&lt; 0=not at all important, 5= extremely important &gt; (slider bar)</p> <ul style="list-style-type: none"> <li>• Educating and raising overall awareness on asbestos safety</li> <li>• Facilitating domestic renovation/demolition/construction by providing information/education on in-situ management of asbestos to home owners.</li> <li>• Facilitating domestic renovation/demolition/construction by providing information on licensed removalists, and waste facilities or landfills to home owners.</li> <li>• Management of areas with naturally occurring asbestos</li> <li>• Management and regulation of illegally dumped asbestos containing material</li> <li>• Providing infrastructure for disposal of asbestos containing waste</li> <li>• Asbestos removal and disposal in case of emergencies</li> <li>• Identifying and collecting information on the location of domestic premises with asbestos containing materials</li> </ul>		
3. Which of the following are your points of contact in the context of asbestos	<p>&lt;select all that apply&gt;</p> <ul style="list-style-type: none"> <li>• Tradespeople</li> <li>• Building owners</li> </ul>	Stakeholders in asbestos management and safety	

management in your LGA?	<ul style="list-style-type: none"> <li>• New home buyers</li> <li>• DIY home renovators</li> <li>• Licensed removalists</li> <li>• Licensed accessors</li> <li>• Private waste management facilities</li> <li>• Other__ &lt;please specify&gt;</li> </ul>		
4. In the context of their importance to asbestos management in your LGA, rate the following stakeholders:	<p>&lt;0=not at all important, 5=most important&gt;</p> <ul style="list-style-type: none"> <li>• Tradespeople</li> <li>• Building owners</li> <li>• New home buyers</li> <li>• DIY home renovators</li> <li>• Licensed removalists</li> <li>• Licensed accessors</li> <li>• Private waste management facilities</li> </ul>	Stakeholders in asbestos management and safety	
5. In which of the following ways does your council maintain and contain asbestos in council owned infrastructure and facilities?	<p>&lt; select all that apply&gt;</p> <ul style="list-style-type: none"> <li>• Identifying the presence and location of asbestos as per the requirement under Work Health and Safety legislation</li> <li>• Practices in-situ management of asbestos where possible</li> <li>• Ensures there is adequate council workforce trained to maintain asbestos containing materials or structures in council owned infrastructure at all times</li> <li>• Contracts private companies to assess, remove or dispose asbestos if council workers do not have the expertise</li> <li>• Other__ &lt; please specify&gt;</li> </ul>	Processes to maintain and contain ACMs in existing infrastructure	
6. In which of the following ways does your council raise awareness and knowledge on asbestos safety and management amongst DIY home renovators?	<p>&lt;select all that apply &gt;</p> <ol style="list-style-type: none"> <li>1. Organizing or facilitating information events or awareness days</li> <li>2. Developing educational trainings for residents</li> <li>3. Distributing equipment kits to assist in the safe removal and disposal of asbestos</li> <li>4. Organising free asbestos waste collection days</li> <li>5. Organising free asbestos inspection days for residential premises</li> <li>6. Distributing educational material relevant to DIY renovators or home owners</li> <li>7. Providing a dedicated section to asbestos safety and management information specific to home owners and renovators on the council website</li> <li>8. Operating a dedicated asbestos related hotline for calls and enquiries</li> <li>9. Organising specific educational or collection initiatives specific to remote Aboriginal and Torres Strait Islander communities</li> <li>10. None of the above</li> </ol>	The role of local governments in education about safe handling and disposal of asbestos containing material with respect to DIY home owners	<p>For every initiative that the respondent <b>selects</b> provide a follow-up question :</p> <p><b>How effective has this initiative been in changing the behavior of DIY renovators and home owners towards asbestos safety and management in your LGA?</b></p> <p><b>(0= not at all effective, somewhat effective, moderately effective, very effective, unsure)</b></p>

	11. Other __ <please specify>		
7. Has your council carried out any of the following asbestos initiatives in your LGA?	<p>&lt;select all that apply&gt;</p> <ul style="list-style-type: none"> <li>• Imposing a mandatory requirement of obtaining a Hazardous Materials Survey from non-workplace or domestic premises prior to renovation, demolition or construction</li> <li>• Asbestos survey of contaminated sites</li> <li>• Asbestos survey of naturally occurring asbestos sites</li> <li>• Survey of houses/buildings constructed prior to 1990s to detect asbestos safety and management in residential areas</li> <li>• Survey of community demands with respect to asbestos transport, storage, and disposal infrastructure</li> <li>• Other initiative__ &lt;please specify&gt;</li> </ul>	Local government asbestos related initiatives	
8. Which of the following measures does your council use to evaluate its asbestos related initiatives?	<p>&lt;select all the apply&gt;</p> <ul style="list-style-type: none"> <li>• Collect and/or monitor trend data from an asbestos register of council assets</li> <li>• Collect and/or monitor data from the Hazardous Materials Survey obtained from domestic or non-workplace premises</li> <li>• Collect and/or monitor data from a contaminated site register or a similar alternative</li> <li>• Collect and/or monitor trend data on illegal dumping of asbestos</li> <li>• Collect and/or monitor annual data on public awareness</li> <li>• Collect and/or monitor data on phone calls received by the council in context to an asbestos issue</li> <li>• Monitor trend data on council asbestos webpage/s hits</li> <li>• None of the above</li> <li>• Other__ &lt;please specify&gt;</li> </ul>	How do local governments evaluate the success of the asbestos related initiatives	
9. Rate the extent to which each of the following factors do or would act as enablers for your council in improving asbestos safety in your LGA	<p>&lt;0= Not at all important, 5= extremely important&gt; (slider bar)</p> <ul style="list-style-type: none"> <li>• Availability of dedicated resources for community asbestos safety and management</li> <li>• Possibility of the council's Environmental Health section to directly enforce regulation</li> <li>• Advocacy from senior levels of the council</li> <li>• Clear delineation of roles and responsibility in relation to governance of asbestos management between local governments, state governments, and the Federal Government</li> <li>• Training of council staff to improve internal knowledge on asbestos</li> <li>• Increased interagency reporting and coordination between different council departments within the local government</li> </ul>	Enablers to education, communication, and behavioral change in handling/removal of ACMs	

	<ul style="list-style-type: none"> <li>Increased interagency reporting and coordination between councils and the private sector stakeholders</li> <li>Increased interagency reporting and coordination between the councils and state government</li> <li>Improving data and information sharing on the location of asbestos in the community, and asbestos that is naturally occurring</li> <li>Other __ &lt;please specify&gt;</li> </ul>		
10. Rate the extent to which each of the following acts as a barrier to education, communication and safe handling/removal of ACMs in your LGA	<p>&lt;0 =not at all a barrier, 5= very large barrier&gt; (slider bar)</p> <ul style="list-style-type: none"> <li>Absence of a clear council strategy on asbestos safety and management</li> <li>Lack of funding attached to asbestos related initiatives</li> <li>Lack of data on location of asbestos containing materials in domestic premises</li> <li>Lack of data on location of illegally dumped asbestos containing material</li> <li>Lack of data on the location of naturally occurring asbestos</li> <li>Lack of infrastructure to collect and store asbestos containing waste</li> <li>Lack of power to enforce regulation at local government level</li> <li>Lack of coordination between different council departments within the local government</li> <li>Lack of coordination between councils and the private sector stakeholders</li> <li>Lack of coordination between the councils and state government</li> <li>Lack of clear delineation of roles and responsibility in relation to governance of asbestos management between local governments and state/territory governments</li> <li>Other__ &lt;please specify&gt;</li> </ul>	Barriers to education, communication, and safe handling/removal of ACMs	
11. Does your council have an asbestos policy?	<p>&lt;select all that apply&gt;</p> <ul style="list-style-type: none"> <li>a) Yes</li> <li>b) No</li> <li>c) In process of being developed</li> <li>d) Unsure</li> </ul>	Standards to guide asbestos management in local government areas	<p>If (a) or (c), go to Question 12</p> <p>If (b) or (d), go to Question 13</p>
12. Which of the following are priority areas of your council's asbestos policy?	<p>&lt;select all that apply&gt;</p> <ul style="list-style-type: none"> <li>Outlining roles and responsibilities of your council in the context of asbestos management</li> <li>Identifying locations with naturally occurring / weathering asbestos and/or asbestos contamination</li> <li>Responding to emergencies and incidents of asbestos removal and disposal</li> <li>Outlining council's processes for assessing development</li> </ul>	Standards to guide asbestos management in local government areas	



	<ul style="list-style-type: none"> <li>• Management of asbestos waste landfills and facilities</li> <li>• Management of asbestos risks within the council workplace and amongst council workers</li> <li>• Other__ &lt;please specify&gt;</li> <li>• Unsure</li> </ul>		
13. Which of the following regulatory standards/policies guide asbestos management in your LGA?	<p>&lt;select all that apply&gt;</p> <ol style="list-style-type: none"> <li>1. Another council's asbestos policy as a minimum standard</li> <li>2. A waste management plan</li> <li>3. A disaster/emergency management plan</li> <li>4. A demolition/construction management plan</li> <li>5. An asset/facilities management plan</li> <li>6. State government's Asbestos Management Policy</li> <li>7. An environmental protection/planning/assessment legislation</li> <li>8. Work/occupational health and safety legislation</li> <li>9. Other__ &lt;please specify&gt;</li> <li>10. Unsure</li> </ol>	Standards to guide asbestos management in local government areas	If chosen 1, go to Q 14, otherwise skip to Q 15
14. Which council's asbestos policy does your council follow?	<select council name> drop down menu		
15. Which of the following initiatives encourage compliance amongst DIY renovators or home owners, to asbestos regulation in your LGA?	<p>&lt;select all the apply&gt;</p> <ol style="list-style-type: none"> <li>1. Issuing infringement notices</li> <li>2. Issuing regulatory penalties/fines</li> <li>3. Subsidizing tip fees for asbestos disposal</li> <li>4. Introduction of mandatory asbestos clearance certificate requirement from home owners/renovators</li> <li>5. Subsidies for those who engage trained asbestos removalists</li> <li>6. Free household asbestos inspections by licensed experts</li> <li>7. Free of charge council initiated assessment, removal, collection and disposal campaigns /days</li> <li>8. Free provision of equipment to facilitate DIY handling of asbestos</li> <li>9. Provision of household asbestos removal kits at subsidized rates</li> <li>10. Frequent routine site visits to monitor compliance to asbestos related regulations by domestic or non-workplace premises</li> <li>11. Registering incidents of asbestos mismanagement</li> <li>12. Registering illegal asbestos dumping</li> <li>13. None of the above</li> </ol>	Council initiatives that encourage compliance amongst home owners and renovators	If selected (5) move to Q 16, otherwise skip to Q 17

	14. Other__<please specify>		
16. What type of subsidy did your council provide?	<select one> <ul style="list-style-type: none"> <li>• Rebate</li> <li>• Cashback</li> <li>• Rate concession</li> <li>• Voucher</li> <li>• Other__&lt;please specify&gt;</li> </ul>	Council initiatives that encourage compliance	
17. Which of the following actions encourage (or would encourage) residents in your LGA to undertake an asbestos survey on their properties in your LGA?	<select all that apply> <ul style="list-style-type: none"> <li>• Mandating the requirement for an asbestos survey when new home owners register for rates notices</li> <li>• Mandating the requirement for an asbestos survey when home owners or DIY renovators submit a development/building application to the council</li> <li>• Organising free residential asbestos inspection days</li> <li>• Organising subsidised residential asbestos inspection days</li> <li>• Providing rebates or subsidies to home owners or DIY owners as an incentive to undertake an asbestos survey</li> <li>• None of the above</li> <li>• Other__ &lt;please specify&gt;</li> </ul>	Points of contact with residents	
18. Does your council operate a waste facility or a landfill that accepts asbestos waste?	<select one> <ul style="list-style-type: none"> <li>• Yes</li> <li>• No</li> <li>• Unsure</li> </ul>		<p>If select no – is there a private waste facility in your LGA that accepts asbestos waste (yes, no unsure) (yes/no/unsure)</p> <p>If select yes then does council promote this facility to residents on the council website</p> <p>If select yes – does one or more of these council operated facilities accept asbestos from commercial builders (yes/no/unsure)</p>
19. In the past 5 years, do you think asbestos related complaints have:	<select one> <ul style="list-style-type: none"> <li>• Increased</li> <li>• Decreased</li> <li>• Stayed about the same</li> <li>• Unsure</li> </ul>	Nature of relationship with stakeholders	Note: Asbestos complaints can be related to: dumping demolitions, renovations, removals, damages caused by emergencies, or transport.

20. How frequently does your council receive an asbestos related complaint?	<p>&lt;select one&gt;</p> <ul style="list-style-type: none"> <li>• At least once a week</li> <li>• At least once a month</li> <li>• At least once in six month</li> <li>• At least once in a year</li> <li>• Unsure</li> </ul>	Nature of relationship with stakeholders	
21. Which of the following best describes the nature of asbestos related complaints received by your council?	<p>&lt;select all the apply&gt;</p> <ul style="list-style-type: none"> <li>• Storm/fire/flooding damage</li> <li>• Illegal dumping practice</li> <li>• Occupier concern about asbestos in residential unit</li> <li>• Poor demolition practices</li> <li>• Lack of community consultation and notifications</li> <li>• Lack of signage/fencing in area with Naturally Occurring Asbestos or ACMs</li> <li>• Improper removal</li> <li>• Improper transport</li> </ul>	Nature of relationship with stakeholders	
22. Does your council's website provide a list of asbestos assessment, removal or transport agencies?	<p>&lt;select one&gt;</p> <ul style="list-style-type: none"> <li>• Yes</li> <li>• No</li> <li>• Unsure</li> </ul>	Nature of relationship with stakeholders	
23. Please indicate what best describes the area or division of council you work in.	<p>&lt;select one from drop down menu&gt;</p> <ul style="list-style-type: none"> <li>• Environmental health</li> <li>• Planning and/or Infrastructure</li> <li>• Local Government Association</li> <li>• Community Services/Community Development</li> <li>• Corporate Services</li> <li>• Other__&lt;please specify&gt;</li> </ul>	Council information	
24. Please indicate which best describes your role within the council	<ul style="list-style-type: none"> <li>• General Manager or CEO</li> <li>• Director or Executive</li> <li>• Manager</li> <li>• Coordinator</li> <li>• Frontline officer</li> <li>• Other__&lt;please specify below&gt;</li> </ul>	Council information	
25. Would you be interested in further participating in this research by participating in a focus group in May 2017?  The interview would enable us to collect more	<p>&lt;select one&gt;</p> <ul style="list-style-type: none"> <li>• Yes, I am interested and would like more information</li> <li>• No, thank you</li> </ul>	Council information	

detailed information about your council's role in safety and management of ACMS.			
26. Please provide your name and contact details so that someone from UTS can contact you for a potential telephone interview.	Name: Contact Details:	Council information	

## Appendix G. Detailed findings from the national survey of local governments<sup>11</sup>

TABLE A7: THE RESPONSIBILITIES OF LOCAL GOVERNMENTS IN THE CONTEXT OF ASBESTOS MANAGEMENT BY STATE

	Total(n=172)	NSW(n=46)	QLD (n=18)	SA (n=17)	TAS (n=12)	VIC (n=38)	WA (n=40)
<b>Managing asbestos in council buildings</b>	81%	80%	89%	76%	92%	71%	85%
<b>Managing and regulating the illegal dumping of asbestos containing materials</b>	80%	89%	89%	59%	75%	63%	93%
<b>Raising awareness and educating the community on the identification and safe removal of asbestos</b>	73%	70%	83%	47%	67%	76%	80%
<b>Ensuring compliance to key asbestos related regulation and policies by home owners</b>	66%	67%	72%	24%	58%	74%	78%
<b>Managing asbestos removal and disposal in case of emergencies</b>	59%	70%	67%	24%	67%	42%	73%
<b>Managing contaminated land sites</b>	44%	70%	39%	18%	42%	18%	53%
<b>Managing asbestos waste by providing or maintaining infrastructure to collect and dispose asbestos containing waste</b>	44%	46%	78%	12%	42%	29%	53%
<b>Managing naturally occurring asbestos on public land</b>	15%	17%	17%	0%	8%	18%	15%

<sup>11</sup> A total of 172 local governments completed the survey. Since it included only one local government from NT, we have not included a separate column for NT in Tables A7 to A12 to protect against spontaneous recognition of that respondent. The 'total' column captures all responses obtained from local governments that responded including the one from NT.

TABLE A8: THE PERCENTAGE OF LOCAL GOVERNMENTS THAT RATED RESPONSIBILITIES FOR ASBESTOS MANAGEMENT AS EXTREMELY OR VERY IMPORTANT BY STATE

	Total (n=172)	NSW (n=46)	QLD (n=18)	SA (n=17)	TAS (n=12)	VIC (n=38)	WA (n=40)
Management and regulation of illegally dumped asbestos containing material	80%	85%	78%	59%	92%	71%	88%
Providing residents with details about waste facilities or landfills that accept residential asbestos containing materials	69%	65%	67%	59%	58%	68%	80%
Asbestos removal and disposal in case of emergencies	66%	63%	61%	29%	83%	63%	83%
Providing information/education on in-situ management of asbestos to home owners.	57%	50%	72%	24%	42%	74%	63%
Educating and raising overall awareness on residential asbestos safety	55%	48%	61%	24%	42%	71%	63%
Providing infrastructure for disposal of asbestos containing waste	48%	61%	72%	12%	33%	24%	63%
Providing residents with information about licensed asbestos removalists	44%	33%	39%	29%	58%	61%	45%
Identifying and collecting information on the location of domestic premises with asbestos containing materials	16%	13%	22%	0%	8%	21%	18%
Management of areas with naturally occurring asbestos	12%	9%	11%	0%	17%	24%	8%

TABLE A9: THE PERCENTAGE OF LOCAL GOVERNMENTS DELIVERING ACTIONS TO DIY HOME RENOVATORS TO HANDLE ASBESTOS SAFELY BY STATE

	Total (n=172)	NSW (n=46)	QLD (n=18)	SA (n=17)	TAS (n=12)	VIC (n=38)	WA (n=40)
Distributing educational material relevant to DIY renovators or home owners	63%	55%	89%	59%	50%	65%	68%
Providing a dedicated section to asbestos safety and management information specific to home owners and renovators on the council website	42%	61%	33%	18%	50%	43%	33%
None of the above	22%	17%	11%	24%	33%	18%	28%
Organising or facilitating information events or awareness days	20%	32%	28%	24%	8%	16%	10%
Developing educational trainings for residents	7%	6%	0%	8%	3%	8%	11%
Distributing equipment kits to assist in the safe removal and disposal of asbestos	6%	6%	0%	0%	8%	3%	11%
Organising free asbestos waste collection days	3%	5%	0%	0%	0%	0%	8%
Operating a dedicated asbestos related hotline for calls and enquiries	1%	0%	0%	0%	0%	0%	5%
Organising free residential asbestos inspection days	1%	2%	0%	0%	0%	0%	0%
Organising specific educational or collection initiatives specific to remote Aboriginal and Torres Strait Islander communities	1%	2%	0%	0%	0%	0%	0%



TABLE A10: THE PERCENTAGE OF LOCAL GOVERNMENTS RATING CURRENT OR POTENTIAL ENABLERS AS VERY IMPORTANT OR IMPORTANT BY STATE

	Total (n=172)	NSW (n=46)	QLD (n=18)	SA (n=17)	TAS (n=12)	VIC (n=38)	WA (n=40)
The ability of council's Environmental Health Officers to directly enforce regulation	72%	72%	89%	29%	50%	71%	90%
Clear delineation of roles and responsibility in relation to governance of asbestos management between local governments, state governments, and the Federal Government	70%	76%	72%	71%	58%	82%	55%
Training of council staff to improve internal knowledge on asbestos	67%	78%	67%	41%	50%	79%	60%
Availability of dedicated resources for community asbestos safety and management	57%	61%	56%	41%	67%	61%	53%
Increased interagency reporting and coordination between the councils and state government	50%	63%	44%	53%	42%	53%	38%
Increased interagency reporting and coordination between different council departments within the local government	46%	39%	56%	35%	33%	55%	50%
Advocacy from senior levels of the council	43%	50%	50%	24%	33%	42%	43%
Increased interagency reporting and coordination between councils and the private sector stakeholders	33%	35%	33%	18%	33%	34%	38%
Improving data and information sharing on the location of asbestos in the community, and asbestos that is naturally occurring	28%	37%	28%	24%	0%	29%	28%

TABLE A11: THE PERCENTAGE OF LOCAL GOVERNMENTS THAT IDENTIFIED ACTIONS THAT WOULD ENCOURAGE RESIDENTIAL ASBESTOS SAFETY BY DIY RENOVATORS AND HOMEOWNERS BY STATE

	Total (n=172)	NSW (n=46)	QLD (n=18)	SA (n=17)	TAS (n=12)	VIC (n=38)	WA (n=40)
<b>Subsidizing tip fees for asbestos disposal</b>	45%	54%	33%	35%	50%	42%	45%
<b>Issuing regulatory penalties/fines</b>	43%	43%	44%	24%	50%	37%	55%
<b>Issuing infringement notices</b>	38%	41%	39%	29%	33%	32%	48%
<b>Registering illegal asbestos dumping</b>	35%	39%	28%	53%	50%	26%	30%
<b>Free household asbestos inspections by licensed experts</b>	33%	50%	28%	24%	33%	29%	25%
<b>Introduction of mandatory asbestos clearance certificate requirement from home owners/renovators</b>	30%	33%	50%	18%	33%	32%	20%
<b>Provision of household asbestos removal kits at subsidised rates</b>	29%	37%	11%	29%	33%	29%	28%
<b>Free provision of equipment to facilitate DIY handling of asbestos</b>	28%	39%	22%	24%	33%	29%	20%
<b>Registering incidents of asbestos mismanagement</b>	28%	20%	22%	29%	50%	37%	28%
<b>Subsidies for those who engage trained asbestos removalists</b>	24%	28%	17%	24%	33%	21%	23%
<b>Free of charge council initiated assessment, removal, collection and disposal campaigns /days</b>	21%	35%	6%	6%	25%	13%	25%
<b>Frequent routine site visits to monitor compliance to asbestos related regulations by domestic or non-workplace premises</b>	20%	22%	11%	6%	25%	21%	25%
<b>None of the above</b>	10%	4%	22%	18%	0%	16%	5%

TABLE A12: THE PERCENTAGE OF LOCAL GOVERNMENTS REPORTING VARIOUS FACTORS AS A LARGE OR VERY LARGE BARRIER TO IMPROVING ASBESTOS SAFETY BY STATE

	Total (n=172)	NSW (n=46)	QLD (n=18)	SA (n=17)	TAS (n=12)	VIC (n=38)	WA (n=40)
<b>Lack of funding attached to asbestos related initiatives</b>	65%	78%	72%	47%	58%	63%	55%
<b>Insufficient resources to enforce asbestos related regulations</b>	53%	61%	61%	53%	67%	55%	35%
<b>Lack of clear delineation of roles and responsibility for asbestos management between governments</b>	44%	46%	50%	41%	33%	50%	25%
<b>Lack of coordination between the councils and state government</b>	38%	35%	50%	44%	36%	51%	25%
<b>Lack of ability to enforce higher penalties for illegal dumping or non-compliant practice</b>	37%	30%	22%	29%	42%	50%	40%
<b>Lack of data on location of asbestos containing materials in domestic premises</b>	37%	43%	39%	24%	33%	37%	33%
<b>Lack of infrastructure to collect and store asbestos containing waste</b>	28%	30%	17%	29%	25%	42%	15%
<b>Absence of a clear council strategy on asbestos safety and management</b>	27%	26%	39%	24%	42%	26%	20%
<b>Lack of data on location of illegally dumped asbestos containing material</b>	25%	30%	22%	12%	17%	26%	25%
<b>Lack of data on the location of naturally occurring asbestos</b>	20%	11%	33%	18%	17%	24%	23%
<b>Lack of coordination between different council departments within the local government</b>	16%	20%	17%	6%	17%	18%	13%



## Appendix H. Local governments delivering asbestos safety initiatives

	Council	State	Type of Initiative				
			<i>Asbestos removal/disposal program or service</i>	<i>Household asbestos removal kits</i>	<i>Asbestos awareness events or sessions</i>	<i>Asbestos testing or inspection program</i>	<i>Illegal dumping of asbestos</i>
1	Ballina Shire Council	NSW	Y	Y	Y		
2	Byron Shire Council	NSW	Y	Y	Y		
3	Clarence Valley Council	NSW	Y		Y		
4	Fairfield City Council	NSW	Y		Y		
5	Gwydir Shire Council	NSW	Y		Y		
6	Lismore City Council	NSW	Y	Y	Y	Y	
7	Maitland City Council	NSW	Y		Y		Y
8	Penrith City Council	NSW	Y		Y		
9	Richmond Valley Council	NSW	Y		Y	Y	
10	Shoalhaven City Council	NSW	Y		Y		
11	Tweed Shire Council	NSW	Y		Y		
12	Upper Lachlan Council	NSW	Y		Y		
13	Wagga Wagga City Council	NSW	Y		Y		
14	Willoughby City Council	NSW	Y		Y		
15	Cumberland Council	NSW		Y	Y		
16	Randwick City Council	NSW		Y	Y		
17	Liverpool Plains Shire Council	NSW		Y	Y		
18	Broken Hill City Council	NSW			Y		
19	Eurobodalla Shire Council	NSW			Y	Y	

20	Wollongong City Council	NSW		Y	Y
21	Bourke Shire Council	NSW		Y	
22	Port Stephens Council	NSW		Y	
23	City of Parramatta Council	NSW	Y		
24	Camden Council	NSW		Y	
25	Port Macquarie-Hastings Council	NSW		Y	
26	Mid-Coast Council	NSW		Y	
27	Bayside City Council	NSW		Y	
28	Berrigan Shire Council	NSW		Y	Y
29	City of Lithgow Council	NSW		Y	Y
30	The Hills Shire Council	NSW		Y	
31	Liverpool City Council	NSW		Y	Y
32	Federation Council	NSW		Y	Y
33	Wingecarribee Shire Council	NSW		Y	Y
34	Nambucca Shire Council	NSW		Y	Y
35	Gunnedah Shire Council	NSW		Y	Y
36	Albury City Council	NSW		Y	Y
37	Bathurst Regional Council	NSW		Y	Y
38	Kyogle Council	NSW		Y	Y
39	Georges River Council	NSW		Y	Y
40	Central Desert Regional Council	NT	Y	Y	
41	Victoria Daly Regional Council	NT		Y	Y

42	Moreton Bay Regional Council	QLD	Y		Y	
43	Sunshine Coast Regional Council	QLD	Y		Y	
44	Townsville City Council	QLD	Y		Y	
45	Cassowary Coast Regional Council	QLD		Y	Y	
46	Mackay Regional Council	QLD			Y	Y
47	Western Downs Regional Council	QLD			Y	
48	Bundaberg Regional Council	QLD			Y	
49	Cairns Regional Council	QLD			Y	
50	South Burnett Regional Council	QLD			Y	
51	Southern Downs Regional Council	QLD			Y	
52	Quilpie Shire Council	QLD			Y	Y
53	Mornington Peninsula Shire Council	QLD			Y	Y
54	Wujal Wujal Aboriginal Shire Council	QLD			Y	Y
55	Burke Shire Council	QLD			Y	Y
56	Adelaide City Council	SA	Y		Y	
57	City of Charles Sturt	SA			Y	
58	Kangaroo Island Council	SA			Y	
59	City of West Torrens	SA			Y	
60	District Council of Copper Coast	SA			Y	



61	City of Victor Harbor	SA		Y	Y
62	Waratah-Wynyard Council	TAS		Y	Y
63	Sorell Council	TAS		Y	Y
64	Brighton Council	TAS		Y	Y
65	East Gippsland Shire	VIC	Y	Y	
66	Mansfield Shire	VIC		Y	Y
67	Latrobe City Council	VIC		Y	Y
68	West Wimmera Shire	VIC		Y	Y
69	Benalla Rural City	VIC		Y	Y
70	Hindmarsh Shire	VIC		Y	Y
71	Loddon Shire Council	VIC		Y	Y
72	Knox City Council	VIC		Y	
73	Casey City Council	VIC		Y	
74	Greater Geelong City Council	VIC		Y	
75	Greater Dandenong City Council	VIC		Y	Y
76	Maribyrnong City Council	VIC		Y	Y
77	Greater Bendigo City Council	VIC		Y	Y
78	South Gippsland Shire Council	VIC		Y	Y
79	Wellington Shire Council	VIC		Y	Y
80	Mount Alexander Shire Council	VIC		Y	Y
81	Strathbogie Shire Council	VIC		Y	Y
82	Frankston City Council	VIC		Y	Y
83	Western Metropolitan	VIC	Y		

	Regional Council							
84	City of Belmont	WA	Y		Y			
85	Town of Cambridge	WA	Y		Y			
86	Shire of Carnarvon	WA	Y		Y			
87	Shire of Exmouth	WA	Y		Y			
88	Shire of Merredin	WA	Y		Y			
89	City of South Perth	WA	Y		N			
90	City of Wanneroo	WA			Y			
91	Shire of Meekatharra	WA		Y	Y			
92	Shire of Williams	WA			Y	Y		
93	Shire of Brookton	WA			Y			
94	City of Vincent	WA			Y			
95	Shire of Toodyay	WA			Y			
96	Town of Bassendean	WA			Y			
97	Town of Claremont	WA			Y	Y		
98	City of Rockingham	WA			Y	Y		
99	City of Canning	WA			Y	Y		
100	Shire of Murray	WA			Y	Y	Y	
101	City of Melville	WA			Y	Y		
102	City of Cockburn	WA			Y	Y		
103	City of Fremantle	WA			Y	Y	Y	
104	Shire of Plantagenet	WA			Y	Y		
105	Shire of Denmark	WA			Y	Y		
106	Shire of Manjimup	WA			Y	Y		
107	Shire of Mundaring	WA			Y	Y		
108	City of Busselton	WA			Y	Y		



## Appendix I. Main links to external resources from local government websites

NSW	<p>Environmental Protection Authority NSW &lt;<a href="http://www.epa.nsw.gov.au/waste/asbestos.htm">www.epa.nsw.gov.au/waste/asbestos.htm</a>&gt;</p> <p>SafeWork NSW &lt;<a href="http://www.safework.nsw.gov.au/health-and-safety/safety-topics-a-z/asbestos">www.safework.nsw.gov.au/health-and-safety/safety-topics-a-z/asbestos</a>&gt;</p> <p>Fair Trading NSW <a href="http://www.loosefillasbestos.nsw.gov.au">www.loosefillasbestos.nsw.gov.au</a></p> <p>NSW Government–Health &lt;&gt; <a href="http://www.health.nsw.gov.au/environment/factsheets/Pages/asbestos-and-health-risks.aspx">www.health.nsw.gov.au/environment/factsheets/Pages/asbestos-and-health-risks.aspx</a></p>
VIC	<p>Victorian Government's asbestos website &lt;<a href="http://www.asbestos.vic.gov.au/">www.asbestos.vic.gov.au/</a>&gt;</p> <p>Environmental Protection Authority Victoria &lt;<a href="http://www.epa.vic.gov.au/your-environment/waste/asbestos">www.epa.vic.gov.au/your-environment/waste/asbestos</a>&gt;</p>
WA	<p>Department of Health &lt;<a href="http://www.healthywa.wa.gov.au/Articles/A_E/Asbestos">www.healthywa.wa.gov.au/Articles/A_E/Asbestos</a>&gt;</p> <p>Department of Commerce WA &lt;<a href="http://www.commerce.wa.gov.au/worksafe/asbestos-frequently-asked-questions">www.commerce.wa.gov.au/worksafe/asbestos-frequently-asked-questions</a>&gt;</p>
SA	<p>South Australia Government's asbestos website &lt;<a href="http://www.asbestos.sa.gov.au/">www.asbestos.sa.gov.au/</a>&gt;</p>
TAS	<p>Tasmania's main asbestos webpage &lt;<a href="http://www.worksafe.tas.gov.au/safety/safety_subjects/subject/asbestos_safety">www.worksafe.tas.gov.au/safety/safety_subjects/subject/asbestos_safety</a>&gt;</p>
NT	<p>WorkSafe Northern Territory &lt;<a href="http://www.worksafe.nt.gov.au/SafetyAndPreventions/Asbestos/Pages/default.aspx">www.worksafe.nt.gov.au/SafetyAndPreventions/Asbestos/Pages/default.aspx</a>&gt;</p>
QLD	<p>Queensland Government's asbestos website &lt;<a href="http://www.deir.qld.gov.au/asbestos/">www.deir.qld.gov.au/asbestos/</a>&gt;</p>
National	<p>Asbestos Awareness Website &lt;<a href="http://www.asbestosawareness.com.au">www.asbestosawareness.com.au</a>&gt;</p> <p>Asbestos: A Guide for Householders and General Public <a href="http://www.health.gov.au/internet/publications/publishing.nsf/Content/asbestos-toc">www.health.gov.au/internet/publications/publishing.nsf/Content/asbestos-toc</a></p> <p>SafeWork Australia Website &lt;<a href="http://www.safeworkaustralia.gov.au/search/site/asbestos">www.safeworkaustralia.gov.au/search/site/asbestos</a>&gt;</p> <p>Blue Lamington Campaign's website &lt;<a href="http://www.bluelamington.com">www.bluelamington.com</a>&gt;</p> <p>Asbestos Diseases Foundation of Australia &lt;<a href="http://www.adfa.org.au/">www.adfa.org.au/</a>&gt;</p> <p>Asbestos Diseases Research Institute &lt;<a href="http://www.adri.org.au">www.adri.org.au</a>&gt;</p>



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